Molinism and Divine Aseity: A Review of Ontological Commitment

by

Richard Matthew Pretorius

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Supervisor: Dr Dion Forster

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Abstract

The doctrine of Molinism seeks to reconcile God's sovereign predestination with humanity's free will by postulating a middle knowledge between God's natural knowledge and God's free knowledge. God's natural knowledge is taken to exist prior to the divine decree and consists of all necessary truths. Through this knowledge, God comprehends the possible so that God knows all ways in which things could be. God's free knowledge exists after the divine decree and is thought of as the knowledge of contingent truths which God determines by creating our world. The Molinist's proposed middle knowledge slots in between God's natural and free knowledge, but before the divine decree.

Through God's middle knowledge, God knows all contingent truths which exist apart from God's control. It is through God's middle knowledge that God comes to know how any free creature would act were they to be left free in any specific set of circumstances. By combining natural knowledge and middle knowledge, the Molinist believes that God is empowered to select and create a feasible world in which all events which transpire do so because God created a world in which they would.

Molinism postulating middle knowledge presents a potential problem: if God's middle knowledge exists prior to the divine decree it must take the form of prevolitional and contingent subjunctive conditionals. If these subjunctive conditionals, taking the form of propositional statements, exist in the metaphysically heavyweight sense, then God would have to draw from outside of the triune Godhead in order to complete middle knowledge. This would seem to undercut God's aseity by making God something other than wholly self-existent and independent.

To address this issue, ontological commitment with respect to abstract objects is investigated. Three broad approaches to abstract objects, namely realism, arealism and anti-realism, are presented. In encountering the platonist's realist view of abstract objects, the Molinist must either defeat the Singular Term argument or find a way to affirm that abstract objects do exist – but as entities which depend upon God in some way or another. To this end, non-platonic realist views and anti-realist views are investigated, both from the perspective of their philosophical content and their theological suitability.

Opsomming

Die doktrine van Molinisme poog om God se soewereine uitverkiesing met die mensdom se vrye wil te versoen deur die postuleer van 'n middel kennis tussen God se natuurlike kennis en God se vrye kennis. God se natuurlike kennis is aangeneem om voor die Goddelike dekreet te bestaan, en bestaan uit alle nodige waarhede. Deur middel van hierdie kennis, het God begrip van die moontlike, sodat God kennis van alle maniere waarop dinge kan wees het. Die gratis kennis van God bestaan na die Goddelike dekreet, en is beskou as die kennis van voorwaardelike waarhede wat God bepaal, deur die skep van ons wêreld. Die Molinis se voorgestelde middel kennis bestaan tussen God se natuurlike en vrye kennis, maar voor die Goddelike dekreet.

Deur God se middel kennis, weet God van alle voorwaardelike waarhede wat uitmekaar God se beheer bestaan. Dit is deur God se middel wete dat God kan weet hoe 'n vrye wesens sou optree as hulle vry gelaat word in enige spesifieke stel omstandighede. Deur die kombinasie van natuurlike kennis en middel kennis, glo die Molinis dat God by magte is om 'n uitvoerbare wêreld te kies en te skep waarin al die gebeure is so omdat God'n wêreld geskep waarin hulle sou gebeur.

Molinisme se postuleer van middel kennis bied 'n potensiële probleem aan: as God se middel kennis voor die Goddelike dekreet bestaan, moet dit die vorm van voorwilsvermoë en afhanklike subjunktief voorwaardelikes neem. As hierdie subjunktief voorwaardelikes, wat die vorm van proposisionele state neem, in die metafisies swaargewigte sin bestaan, sal God buite die Drie-enige Godheid moet trek ten einde van die voltooi van middel kennis. Dit lyk of God se Goddelike "aseity" ondermyn is deur God te verstaan as iets anders as geheel selfbestaande en onafhanklik.

Om hierdie probleem aan te spreek, is ontologiese verbintenis met betrekking tot abstrakte voorwerpe ondersoek. Drie breë benaderings tot abstrakte voorwerpe, naamlik realisme, arealism en anti-realisme, word aangebied. In benadering tot die platoniese realistiese siening van abstrakte voorwerpe, moet die Molinis óf verslaan die enkelvoud termyn argument, of 'n manier vind om te bevestig dat abstrakte voorwerpe bestaan - maar as entiteite wat afhanklik van God op een of ander manier is. Vir hierdie doel, is nie-platoniese real-

istiese en nie-realistiese sienings ondersoek, beide vanuit die perspektief van hul filosofiese inhoud en hul teologiese geskiktheid.

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Contents

Chapter 1

Introduction

1.1 Background and Rationale

The doctrine of Molinism seeks to reconcile God's sovereign predestination with humanity's free will by postulating a middle knowledge between God's natural knowledge and free knowledge (Perszyk, 2013). First promulgated by Luis de Molina during the 16th century, Molinism and middle knowledge has recently been defended by a variety of theologians and philosophers such as William Lane Craig (Craig, 1999), Alfred Freddoso (de Molina, 1988, p. 1-81), Jonathan Kvanvig (Kvanvig, 1986), Thomas Flint (Flint, 1998) and Alvin Plantinga (Plantinga, 1974b).

Molina's work was inspired by the commonly held concern that God's infallible foreknowledge implies a denial of human freedom. Within Molinism, there are three logical moments in the life of God which have been diagrammed as follows:

> Moment 1: God's natural knowledge of everything that could be.
> Moment 2: God's middle knowledge of everything that would be.
> Divine Decree
> Moment 3: God's free knowledge of everything that will happen in the actual world (Campbell, 2006, p. 2).

Campbell explains this by saying "Prior to creation of the space-time continuum, God's knowledge exists as timeless intuition which comprehends all

truth" (Campbell, 2006, p. 2). The Molinist claims that God is atemporal, at least at this stage, and as such is incapable of having successive temporal experiences - thereby accounting for them being denoted as moments of divine cognition (Campbell, 2006, p. 1-4).

The first of these moments is natural knowledge. Divine natural knowledge is made up of all necessary truths – truths such as "no bachelor can be married" or "$2 + 2 = 4$". Through natural knowledge, God comprehends every possible state of affairs such that God is able to comprehend a seemingly infinite variety of possible worlds that could exist were God to will them into being (Campbell, 2006, p. 2). God's natural knowledge is deemed natural because it is necessary and essential, and would exist this way irrespective of whether the universe were to exist or not (Perszyk, 2013, p. 755-756).

The third moment is the free knowledge of God which comprises of complete knowledge of our current and contingent world. This knowledge is free because it is determined by God's free choice to actualise our world rather than a different world, or simply not create at all (Campbell, 2006, p. 2-3). As a result, this knowledge is both contingent and entirely under God's control (Perszyk, 2013, p. 755-756).

Where God's natural knowledge exists prior to the divine decree, God's free knowledge exist only after God has determined this knowledge by creating (Flint, 1998, p. 36-38).

The second moment is God's middle knowledge, and it is through this knowledge that God knows what would have happened had God acted differently (Perszyk, 2013, p. 755-756). Through God's middle knowledge, the Molinist claims that God has knowledge of contingent truths which God does not control. Because this knowledge exists prior to the divine decree, this knowledge is said to exist prior to God's act of volition – or prevolitionally – and as such can inform the divine will (Flint, 1998, p.37-40).

This middle knowledge can be said to exist prevolitionally as contingent subjunctive conditionals which God does not control. By defining middle knowledge this way, the Molinist affirms that God's middle knowledge is not determined by God, that this middle knowledge exists prior to the divine decree and that this middle knowledge can be characterised by means of subjunct-

ive conditionals – that is, a conditional statement phrased in the subjunctive mood[1] (Flint, 1998, p. 38-41).

Perszyk elaborates on this by saying "More precisely, God has middle knowledge only if there are true counterfactuals of creaturely freedom that are contingent but outside of his [sic] control" (Perszyk, 2013, p. 755). These counterfactuals of creaturely freedom can be thought of as what any free creature would freely choose to do under a specific set of circumstances if they were given the opportunity (Perszyk, 2013, p. 756-757).

Understanding how God's middle knowledge allows the Molinist to affirm both divine providence and human freedom is somewhat complicated. Here is a cursory overview of how this is said to occur: God's natural knowledge gives God knowledge of all necessary truths. By God's natural knowledge, God is able to comprehend all possibilities. As a result of this, God is able to comprehend every way in which creation could possibly exist. These necessary truths exist apart from God's control and before the divine decree.

God's middle knowledge also exists before the divine decree and apart from God's control, but is made up of contingent truths which are not determined by God. Through God's middle knowledge, God is able to know how any free creature would behave were they left free in a specific set of circumstances at a specific time. As a result of this, God is able to know how free creatures would act were they to be created and placed in any possible set of circumstances where they were left free.

In combining God's natural knowledge and God's middle knowledge, the Molinist believes that God is given the possibility to survey possible worlds before actualising our world (Beilby & Eddy, 2001, p. 120-123), having perfect knowledge of how free agents would act in any possible world in which they are left free. Armed with this knowledge, God is then able to choose a world from the range of worlds now feasible for God to create such that everything which happens, happens that way because God's will is for it to happen that way whilst humans are afforded libertarian freedom.

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[1] To be phrased in the subjunctive mood is to be written in the form of "*If... then...*" For example, "if I were you, then I would listen to these instructions."

1.2 Statement of the Problem

One objection to Molinism, raised by Travis Campbell, is that middle knowledge compromises the self-existence and self-sufficiency of God. Campbell argues that if God possesses middle knowledge, God's knowledge is partially determined by the free choices of creatures - something which Campbell argues introduces passive potency into God's knowledge (Campbell, 2006, p. 16). God's middle knowledge, then, is determined by the free choices of the creatures God creates, making God "something less than absolutely independent" (Campbell, 2006, p. 16) and requiring God's knowledge to be completed by drawing on something outside of the triune Godhead, thereby making God less than wholly self-existent (Campbell, 2006, p. 16).

The Molinist views God's middle knowledge as being made up of a collection of possible worlds which can be best thought of as a series of propositional conjunctions which describe states of affairs (Craig, 2008, p. 183). These propositional conjunctions operate as maximal descriptions of reality such that God has perfect knowledge of all possible future worlds prior to any world being actualised (Beilby & Eddy, 2001, p. 120-123). With these possible worlds existing as propositional conjunctions prior to the divine decree, it stands to reason that in order to respond to Campbell's claim, the Molinist must consider and formulate a view of abstract objects, and particularly propositional truths.

It should be made clear that this work will not endeavour to defend Molinist in any way. This work will not look to criticise Molinism either[2]. Rather, this work simply aims to consider and solve a problem for the Molinist: namely the potential problem of the relationship between God's middle knowledge and abstract objects.

1.3 Research Questions

Primary Question:

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[2] Readers interested in criticism of Molinism are directed to the work of William Hasker (Hasker, 1989). Hasker presents a version of the grounding objection – the objection which asks *if creatures do not yet exist when middle knowledge does, who actually determines these contingent truths?*

(1) How can the Molinist preserve God's aseity while affirming God's middle knowledge?

Secondary Questions:

(2) What is Molinism?

(3) What is Campbell's objection to Molinism and middle knowledge?

(4) Which positions can be adopted when considering abstract objects?

(5) How does Quine's Indispensability Argument withstand critique?

(6) Which positions regarding abstract objects are viable for the Molinist?

1.4 Contribution and Relevance

William Lane Craig once said that it will "be on the basis of practical applications — the theological fruitfulness or lack thereof — that Molinism [ultimately] stands or falls" (Craig, 1995, p. 121). The relationship between abstract objects, ontological commitment and God's aseity seems to be exactly that. Does a way exist for the Molinist to affirm both God's aseity and God's middle knowledge? That is the motivating and very practical aspect of this study. While the answer to this question may appear to be somewhat abstract given it is located in the intricacies of metaphysics and ontological commitment, the study as a whole is both practical and relevant to the viability of Molinism.

1.5 Research Methodology

This research will be a non-empirical study (Mouton, 2001, p. 57) mainly focussed on a review of academic literature in Molinism, abstract objects and metaphysics with regards to ontological commitment. The study will consist of a brief description of Molinism and Molinism's fundamental pillars: divine providence and libertarian freedom. Divine aseity as understood by the Molinist and the classical theist will also be defined before a more detailed view of God's knowledge as understood by the Molinist is examined.

After seeing that God's middle knowledge must exist in abstract for if it is to exist prior to the divine decree, the study will move on to examining three broad views of abstract objects: realism, arealism and anti-realism.

Realism, which affirms that abstract objects exist in the same way that you or I exist (Craig, 2015, p.274-275), will be examined first. Next the arealist position, which affirms that there exits no fact of the matter regarding the existence of abstract objects (Craig, 2016, p. 206), will be considered. Finally, options which affirm that abstract objects do not exist, called anti-realism (Craig, 2016, p. 210), will be considered.

It is hoped that this study will provide a framework for considering the Molinist's options with respect to abstract objects, examining how each option impacts the traditionally held understanding of God's aseity.

1.6 An Introduction to the Primary Literature and Concepts

1.6.1 An Introduction to Molinism

> Chapter two of this work provides a framework for locating the problem - namely within Molinism. It provides a background to Molinism before exploring three fundamental aspects of Molinism: divine providence, divine aseity and libertarian free will. Finally, the way in which the Molinist views God's knowledge is expounded upon.

Molinism is named after Luis de Molina, a Jesuit who lived from 1535-1600. Molinism is motivated by a commitment to two pillars, the first of which is libertarian freedom (Perszyk, 2000, p. 11-33). Ken Perszyk minimally defines libertarianism as "the thesis that freedom is incompatible with (causal) determinism, plus the claim that at least some of our actions are free" (Perszyk, 2013, p. 755).

The second of these pillars is the commitment to a strong traditional account of divine providence, entailing the thesis that everything which happens is either

specifically intended or permitted by God (Perszyk, 2013, p. 755). On the Molinist account, this can be seen to affirm that things exist in the currently world the way in which they do because God chose to create the world in such a way that they exist as they do.

A third aspect which is important for the argument of this thesis is God's aseity. God's aseity is defined as being God's self sufficience, God's independence from creation and God's necessity – that is to say, the fact that God exists by necessity of God's own nature (Grudem, 2000, p.161-162). In this respect, the Molinist's position draws on two sources: that of classical theism and the foundation created by the Ontological Argument for God's existence.

The Ontological Argument for God's existence can be thought of as being foundational because recent defenders and developers of Molinism have developed, defended and made use of the Ontological Argument when considering aspects of God such as God's existence[3] or God's freedom[4]. Thomas Flint makes the point that Molinist typically concurs with classical theism so that where Molinism has nothing to say, the classical theistic position is likely to provide a good foundational point for inquiry (Flint, 1998, p. 12).

The internal tension which exists between divine providence and human libertarian freedom is clear for all to see, but the Molinist believes that this tension can be dispelled by the promulgation of the doctrine of divine middle knowledge: the defining aspect of Molinism (Perszyk, 2013, p. 755-756). Middle knowledge gets its name because it is said to stand between God's natural knowlege and free knowledge (Campbell, 2006, p. 3). The Molinist understands God's natural knowledge to be that which God knows to be necessary, and through this, God knows what is possible. The Molinist understands God's free knowledge to be that which will be (Perszyk, 2013, p. 755-756). God's middle knowledge, then, "comprehends everything that would have happened if God had been willing to decree its occurrence" (Campbell, 2006, p. 3).

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[3] William Lane Craig (Craig, 2008) has fervently argued for God's existence whilst making use of the Ontological Argument as formulated by Alvin Plantinga (Craig, 2008, p. 184-189).

[4] Thomas Flint (Flint, 1983) has defended the Ontological Argument as formulated by Alvin Plantinga in relation to God's free will.

1.6.2 Possible Worlds and Campbell's Objection

> Chapter three of this work begins by examining how God's middle knowledge manifests itself through the concept of a possible world. An objection to Molinist which is raised by Travis Campbell is then introduced and defined, showing how Campbell believes middle knowledge would undercut God's aseity. Campbell's objection is different from, but related to, an older objection raised by Reginald Garrigou-Lagrange, which is also explored before a logical limitation regarding God's omnipotence is provided in an attempt to limit this objection's impact on Molinism.

The Molinist affirms that it is through this middle knowledge that God is able to know of a vast array of possible worlds, and from these possible worlds, God chooses to actualise our current world (Craig, 2008, p. 182-185). Craig describes these possible worlds as "maximal descriptions of reality, or a way reality might be" (Craig, 2008, p. 183). These possible worlds are conjunctions which are made up of every proposition or its contradictory within that world, such that a maximal description of reality is rendered (Craig, 2008, p. 182-185).

It is at this point that we discover Campbell's objection to middle knowledge. Campbell claims that middle knowledge compromises God's aseity by making some aspect of God's knowledge dependent on a source which exists apart from the triune Godhead (Campbell, 2006, p. 16). This is because God does not define the content of middle knowledge – rather God's middle knowledge of how free creatures will decide is defined by how the free creatures will choose.

By aseity, Campbell means to say that God "is pure actuality (there is no potentiality [or passive potency] in his being); that he is wholly independent and uncaused; that he is his act of existing; and so forth" (Campbell, 2006, p. 16). This means that some amount of God's knowledge is not determined by God, thereby introducing "passive potency into God's knowledge" (Campbell, 2006, p. 16). Furthermore, Campbell claims that middle knowledge makes God something other than wholly self-contained, because God is required to complete God's knowledge by drawing on something outside of the Godhead (Campbell, 2006, p.19).

Campbell's objection is distinct from, but influenced by, an objection raised by Reginald Garrigou-Lagrange (Garrigou-Lagrange, 1934, p.557-558). Garrigou-Lagrange was a Thomist who believed that if God was to be thought of as pure actuality, this meant that all of God's knowledge must be self-determined (Craig, 1991, p.270). Thomas Flint and Alfred Freddoso affirm that God's knowledge being made up in this way is as a result of the logical limitation of God choosing to create free creatures (Flint & Freddoso, 1983, p. 93-98). Flint and Freddoso also affirm that a limitation of this type is similar to the limitation which would be imposed upon God such that God is omnipotent but unable to create a square circle, or something of that nature (Flint & Freddoso, 1983, p. 95).

In responding to the objection with Flint and Freddoso's logical argument, Campbell's claim that God's middle knowledge must still be completed by reaching outside of the triune Godhead could still exist if we think of propositions, possible worlds and other abstract objects as existing.

1.6.3 Abstract Objects: Realism and the Singular Term Argument

> Chapter four begins by defining what an abstract object is before outlining how one could, broadly speaking, approach abstract objects. This chapter then examines realist options with respect to abstract objects. The platonist's Singular Term argument is outlined, an argument which the platonist is motivated towards by the view that mathematical objects are indispensable for the truth of natural scientific theories.

With possible worlds, states of affairs and propositions being considered abstract objects (Gould, 2011a, p.255-256), it stands to reason that the way the Molinist must respond to Campbell's objection is by formulating a defined view of abstract objects. A number of ways to think about abstract objects exist, and these can be broken into three broad categories: realism, arealism and anti-realism (Craig, 2016, p. 203-206). Investigation begins with realism, and more specifically, platonism.

Platonism is the view that mind-independent abstract objects exist uncreated (Craig, 2016, p. 201). Platonists affirm that we are committed to the existence of abstract objects by many statements we consider to be true (Balaguer, 2016). Notably, the platonist claims that mathematics is indispensable for many of our scientific theories (Craig, 2016, p. 210). To show this to be true, platonist's provide a Singular Term argument, which can be formulated as such:

(1) If a simple sentence (i.e., a sentence of the form "a is F", or "a is R-related to b", or. . .) is literally true, then the objects that its singular terms denote exist. (Likewise, if an existential sentence is literally true, then there exist objects of the relevant kinds; e.g., if "There is an F" is true, then there exist some Fs.)

(2) There are literally true simple sentences containing singular terms that refer to things that could only be abstract objects. (Likewise, there are literally true existential statements whose existential quantifiers range over things that could only be abstract objects.) Therefore,

(3) Abstract objects exist (Balaguer, 2016).

This is the crux of the argument for platonism — the attempt to make abstract objects indispensable. Ultimately, this argument is concerned with metaphysics and specifically, ontological commitment. If we are committed to the existence of abstract objects referred to in propositional statements in order for those statements to be true, then platonism may well be indispensable (Craig, 2013, p. 355-357).

After having considered this argument, three theistic realist positions are considered: platonic theism (van Inwagen, 2009, p. 4-11), absolute creationism (Morris & Menzel, 1986, p. 353-362) and divine conceptualism (Welty, 2006).

Platonic Theism: Platonic theism is the position held by Peter van Inwagen. Van Inwagen believes that the Singular Term argument is in fact true (van Inwagen, 2015b, p. 289), thereby affirming that abstract objects are required if we are to speak meaningfully and truthfully. At the same time, van Inwagen recognises that by affirming that abstract objects exist uncreated and alongside

God, God's aseity as classically understood could be undercut (van Inwagen, 2009, p. 3-5). To get around this, van Inwagen proposes that abstract objects are not able to be created by God and as a result of this, when the Nicene Creed affirms that all things are created by God, the Nicene Creed is referring only to things which can be created and not all things (van Inwagen, 2009, p. 4-11).

Absolute Creationism: Promulgated by Thomas Morris and Christopher Menzel (Morris & Menzel, 1986, p.353-362), absolute creationism views abstract objects as being created by God, with the claim that abstract objects exist as entities within the mind of God being disputed. On this view, abstract objects are said to depend upon God for their existence, having begun to exist at some time (Morris & Menzel, 1986, p. 354). Unfortunately, this view suffers from what Paul Gould categorises as a fatal flaw - that of the bootstrapping objection (Gould, 2011a, p. 268-269).

Divine Conceptualism: Greg Welty's (Welty, 2006) divine conceptualism views abstract objects such as properties, possible worlds and propositions as existing in the divine mind as God's thoughts in some way (Craig, 2016, p. 209). As such, these abstract objects exist dependent upon God and within God's mind. Welty takes propositions of this nature to describe the truths found in God's knowledge (Welty, 2004, p. 55-57) so that by affirming "3 is a prime number" we would simply be describing a truth about the object *3* which exists in God's mind. A number of complications exist with adhering to divine conceptualism, though this view remains a very viable option for the Molinist.

1.6.4 Abstract Objects: Arealism and Anti-Realism

> Chapter five continues to explore ontological commitment, beginning with arealism. This view is quickly dismissed before a survey of some anti-realist positions commences. Anti-realist views considered include fictionalism, figuralism, free logic, Meinongianism, neo-Meinongianism and neutral logic. Each of the aforementioned views look to object to or undercut one or both of the premises of the Singular Term argument.

Further investigation begins with arealism. Arealism finds its roots in the classical work of Rudolf Carnap (Carnap, 1956), and can be thought of as the view that "there just is no fact of the matter concerning the existence of putative abstract objects" (Craig, 2015, p. 274-275). This option seems to be one which can be rejected out of hand by the Molinist, on account of the fact that if all reality *extra se* is created by God, then a fact of the matter regarding the existence of putative abstract objects most certainly does exist (Craig, 2016, p. 206-207).

Anti-realism, as Craig prefers (Craig, 2015, p. 274-275), or Nominalism, as Gould calls it (Gould, 2011a, p. 271-274), is the final broad option available to the Molinist. On this view, abstract objects simply do not exist and as a result the problem of God and abstract objects is avoided entirely (Gould, 2011b, p. 271). The Nominalist builds their argument off of the response to the Indispensability Argument by showing that there are a number of instances in which propositional statements can be truthfully descriptive without their objects needing to exist (Gould, 2011b, p. 271-274).

The first anti-realist position considered is called fictionalism (Balaguer, 2015), which treats abstract objects as useful fictions (Craig, 2012, p. 442). With respect to the Singular Term argument, fictionalism accepts (1) but rejects (2). The second anti-realist position is called figuralism (Yablo, 2000). This view argues we ought to treat discourse regarding abstract objects in the same way we treat figures of speech like "I have butterflies in my stomach" or "it's raining cats and dogs!" (Craig, 2016, p. 211-212).

Free logic is the anti-realist position which affirms that singular terms in simple sentences need not make reference at all (Lambert, 2001, p.258). On this view, the principles of Existential Generalisation and Universal Instantiation are reformulated so as to reduce ontological commitment (Craig, 2012, p. 446). On this view, ontological commitment with respect to singular terms in simple sentences is removed, but ontological commitment in existential quantification remains (Craig, 2012, p. 445).

The anti-realist positions of Meinongianism (Meinong, 1960), neo-Meinongianism (Routley, 1979) and neutral logic (Azzouni, 2004) are considered last. Meinong believed that a distinction could be made between beings which *exist* and beings which *subsist*, with abstract objects which have being subsisting (van In-

wagen, 2008, p.38-39). Neo-Meinonganism is the anti-realist view which affirms that one can make reference by means of singular terms in simple sentences to non-existent abstract objects (Craig, 2015, p. 275-276). Finally, neutral logic is the view which criticises classical logic's existence assumption when quantifying over objects (Reicher, 2015). The neutral logician would affirm that it is completely reasonable to quantify without making any ontological commitment, thereby allowing one to quantify over numbers, for example, without being committed to grounding those objects in reality in any way (Craig, 2012, p. 447).

The Molinist need not select any one of these specific options in order to show that the realist's argument is flawed. Rather, the Molinist must simply show that these arguments are viable in order to show that the anti-realist position as a whole is viable (Craig, 2012, p. 451).

1.6.5 Conclusion

> The final chapter provides concluding thoughts regarding the position the Molinist finds themselves in. By showing that options apart from platonism, and indeed realism, exist the Molinist is well within their rights to affirm a view which rejects the ontological commitment the platonist affirms. In doing this, the Molinist is free to deny the existence of abstract objects, thereby sidestepping Campbell's objection and preserving God's aseity.

A variety of objections to the platonist's Singular Term argument are pointed out in this work, with a number of views being shown to be viable options for the Molinist. Furthermore, even if the Molinst were to be convinced by the Singular Term argument, this does nothing to affirm the view that abstract objects exist uncreated. The Molinist may easily select one of the realist options open to the theist, thereby seeing abstract objects as created by and dependent upon God.

As long as the Molinist does not adhere to the view that abstract objects exist uncreated and alongside God eternally, the Molinist is able to sidestep Campbell's objection to middle knowledge. Middle knowledge exist prior to

the divine decree, and as a result, contingent, prevolitional subjunctive conditionals must take the form of abstract objects. If abstract objects do not exist, or if they exist as created entities which are dependent upon God, God's knowledge remains wholly self-contained and as a result God can continue to be seen as being independent, self-sufficient, wholly self-existent and necessary.

Chapter 2

An Introduction to Molinism

2.1 Introduction

Luis de Molina was a Spanish counter-reforming Jesuit who lived from 1535-1600. Molina became involved in debates surrounding the doctrine of divine providence and set forth his views on the topic in his work titled *Liberi Arbitrii cum Gratiae Donis, Divina Praescientia, Providentia, Praedestinatione et Reprobatione Concordia* — colloquially referred to as the Concordia (Flint, 1998, p. 2). Initially the work was heavily criticised by Molina's contemporaries before drifting into the background of the divine providence-philosophical landscape. In his attempt to respond to the problem of evil, Alvin Plantinga unwittingly promulgated the doctrine of Molinism and middle knowledge in the mid 1970s and in doing so, brought the debate to the attention of English-speaking philosophers[1] (Plantinga, 1974a, p. 34-44).

By way of reiteration, it should be noted that this work is primarily focused on the philosophical content of Molina's work rather than the philosophical history of his work. To that end, this chapter will review the doctrine of Molinism by considering and defining some of the fundamental aspects of the doctrine,

[1] Henceforth I shall use the term *Molinist* to refer to a person who adheres with the view of Molinism as promulgated by contemporary Molinists like Alvin Plantinga (Plantinga, 1974b), Thomas Flint (Flint, 1998), William Lane Craig (Craig, 1999), Alfred Freddoso (de Molina, 1988, p. 1-81) or Thomas Kvanvig (Kvanvig, 1986).

beginning with the first of the pillars of the doctrine: divine providence (Perszyk, 2013, p. 755).

2.2 Divine Providence

Understanding Molinism begins by establishing some number of truth claims regarding divine attributes of God. Molinists view God as the creator of all things (Flint, 1998, p. 37) and believe God is omnipotent[2], omniscient[3] and omnibenevolent[4] (Flint, 1998, p. 12). This section shows that while these attributes may not be universally accepted as ascribed to God, it is not outside of Christian tradition to do so.

Molinism affirms many of the attributes of God which the classical theist would, viewing God as the creator of all things (Flint, 1998, p. 37) and adhering to the notion that divine providence is the natural outworking of God's perfect knowledge, love and power. Speaking of the matter, Thomas Flint says:

> Being omniscient, God has complete and detailed knowledge of his world — its history, its current state, and its future. Being omnipotent, God has complete and specific control over that world, a world which has developed and will continue to evolve in accord with his sovereign and never-failing will. Being omnibenevolent, God has used his knowledge and power to fashion and execute a plan for his world that manifests his own moral perfection and the inexhaustible love he bears for his creation (Flint, 1998, p. 12).

The Molinist believes God has complete knowledge of our universe. God knows all things about our past, present and future. The Molinist also asserts that

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[2] I take God's omnipotence to be God's capacity to unfailingly achieve God's divine will – a view affirmed by Flint (Flint, 1998, p. 12) and Wayne Grudem (Grudem, 2000, p. 216-218).

[3] I take God's omniscience to be God's complete and perfect knowledge of all things which are possible, the Godhead and the actual world – a view also affirmed by Wayne Grudem (Grudem, 2000, p. 190-193).

[4] I take God's omnibenevolence to mean that God is perfectly good (Grudem, 2000, p. 197-200) and that God is the standard for moral perfection (Flint, 1998, p. 12).

God controls our universe and has done so in a specific and deliberate way from the beginning of our universe and will continue to do so as we progress through time.

Furthermore, the Molinist holds that God is the measure of moral perfection, perfectly embodies love, and outwardly works, or manifests, this this love through all activity. In viewing God this way, the Molinist would affirm that all of God's activity is perfectly good, expressing perfect love and never failing to fulfil the divine will.

Additionally, the Molinist view of divine providence holds that everything which happens in this world is either specifically ordained or permitted by God[5] (Perszyk, 2013, p. 755). Nothing which happens does so without God's knowledge or without God's permission – every minute detail of our world falls under the purview of God.

It is important to note that the Molinist holds that divine providence extends beyond a plan for each individual to literally everything in our world — animals, families, people groups, nations etc (Flint, 1998, p. 12-22). This is important to note because the Molinist holds that God's knowledge of and interaction with creation is not limited to any subset of reality. The divine will is not concerned only with humans but rather will all of creation.

Very little, if anything, in Christianity could be considered to be unequivocally accepted as a foundational belief[6]. Divine providence is no exception (Flint, 1998, p. 4-6). Nevertheless, the view that God has certain and complete foreknowledge while also exercising strong and specific sovereignty[7] over our world

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[5] Grudem defines God's providence as such "God is continually involved with all created things in such a way that he (1) keeps them existing and maintaining the properties with which he created them; (2) cooperates with created things in every action, directing their distinctive properties to cause them to act as they do; and (3) directs them to fulfil his purposes" (Grudem, 2000, p. 315). The Molinist would concur with (1) and (3), but differs on (2) as will be seen.

[6] By this I mean to say that very little within Christianity is unanimously agreed upon.

[7] I take God's sovereignty to be the way in which God uses the property of omnipotence to interact with and rule over creation such that God ensures the divine will is achieved (Grudem, 2000, p. 217).

is in no way controversial (Flint, 1998, p. 12-15). In fact, this view is more likely to be considered a traditional view of God.

Consider, for example, this excerpt from the Westminster Confession of Faith of 1647:

> God, the great Creator of all things, doth uphold, direct, dispose, and govern all creatures, actions and things, from the greatest even to the least, by his most wise and holy providence, according to his infallible foreknowledge, and the free and immutable counsel of his own will, to the praise of the glory of his wisdom, power, justice, goodness, and mercy (Williamson, 1964, p. 46).

The Westminster Confession concurs with the Molinist in viewing God as the creator of all things, as well as saying that God's knowledge is unfaltering, knowing all things in our universe — past, present and future. God's involvement in all aspects of our universe's progress up until this point as well as going forwards is similarly agreed upon, with God's scope of involvement being unrestricted. Attributes thought of as being God's such as divine goodness, justice and power are also shared by the Westminster Confession and the Molinist (Flint, 1998, p. 15).

Thus, the Molinist concurs with the Westminster Confession in saying that God is concerned with all of reality, knowing of and sovereignly ruling over creation whilst directing all things by the perfectly good divine will.

The First Vatican Council also shares these views of God:

> By his providence God protects and governs all things which he has made, "reaching mightily from one end of the earth to the other, and ordering all things well" [Wisdom 8:1]. For "all are open and laid bare to his eyes" [Hebrews 4:13], even those things which are yet to come into existence through the free action of creatures (FirstVaticanCouncil, 1994, p. 80).

The Molinist concurs with the First Vatican Council in affirming that God's knowledge is comprehensive and complete. Similarly, the First Vatican Council

and the Molinist agree when saying that God's knowledge is neither limited to ongoing events nor that which has transpired. God's knowledge extends to the future – knowing even that which is in no way naturally determined.

John Calvin shared a similar view of God's sovereignty, expressing his view in 1536 when he said:

> After learning that there is a Creator, [faith] must forthwith infer that he is also a Governor and Preserver, and that, not by producing a kind of general motion in the machine of the globe as well as in each of its parts, but by a special Providence sustaining, cherishing, superintending, all the things which he has made, to the very minutest, even to a sparrow (Calvin, 2005, p. 180-181).

Calvin and the Molinist agree that all of reality can be thought of as within God's providence – from the greatest to the smallest. The things which fall under God's providence can be thought of as being directly a part of the divine will and as such for a part of God's omniscience and are sustained by God's omnipotence.

Furthermore, Calvin concurs that God, as creator, exercises power in such a way that all things are worked deliberately and specifically such that "nothing happens but what he has knowingly and willingly decreed" (Calvin, 2005, p. 183).

This view of divine providence is similarly formulated and shared by Thomas Aquinas, who held that God knows the truth value of future events which are not physically determined by present events[8] (Aquinas, 1948). In expressing this, Aquinas affirms that God's knowledge of future events extends beyond that which is necessitated by natural events or the current natural state of our world. Aquinas and the Molinist agree that God's knowledge is made up of both the entirety of the natural state of our world as well as the free decisions which have yet to be made by free agents.

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[8] Aquinas' views on the matter can be found in *Summa Theologica*, Ia, Q. 14, Art. 13

Aquinas also agrees with the aforementioned views of God's sovereignty, stating as much in his work *Summa Theologiae*[9] (Aquinas, 1948).

These citations are by no means a proof of anything, though they do serve as evidence of the fact that the Molinist view of God's foreknowledge and sovereignty is both well founded and widely accepted throughout the classical Christian world view. In affirming God's foreknowledge and sovereignty in this way, the Molinist's claim cannot be thought of being radical or outside of the classical theistic bounds.

2.3 Divine Aseity

The word aseity is derived from the Latin words *a se* which can be directly translated as "from himself" (Grudem, 2000, p. 161). Ascribed to God, this attribute is termed divine aseity and is interpreted to mean that God exist independently of all creation, that God is self-sufficient, that God exists necessarily and that God exists by virtue of God's own nature (Grudem, 2000, p. 161-162).

A great deal of work pouring over and interpreting biblical scripture has been done to show that this attribute, as detailed above, ought to be ascribed to God. Having said that, examining that material is not the task of this work[10].

Nevertheless, this work does contend that preserving God's aseity as outlined is a priority for the Molinist. There are two reasons this is asserted.

First, viewing God as a self-sufficient, necessary and therefore an uncreated being is something which has been affirmed as being true on many occasions in Christian history. Perhaps the best example of this can be found in the Nicene Creed[11]:

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[9] Aquinas' views on God's sovereignty can be found in *Summa Theologica*, Ia, Q. 22, Art. 2

[10] Craig has done a significant amount of work in this regard recently, looking to show that God exists uncreated and that all creation which exist *extra se* should be considered as having been created by God (Craig, 2016, p. 202-205).

[11] Here I have quoted as segment of the Nicene Creed as revised at Constantinople in A.D. 381.

> I believe in one God, the Father, Almighty, Maker of heaven and earth and of all things visible and invisibe;
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> And in one Lord, Jesus Christ, the only begotten Son of God, begotten of the Father before all worlds, God of God, Light of Light, very God of very God, begotten, not made, being of one substance with the Father; by whom all things were made (Grudem, 2000, p. 1169).

God is affirmed here as being uncreated and existing prior to creation of the world[12]. A similar view is promulgated by the Westminster Confession of Faith of 1647:

> God hath all life, glory, goodness, blessedness, in and of himself; and is alone in and unto himself all-sufficient, not standing in need of any creatures which he hath made, not deriving any glory from them, but only manifesting his own glory, in, by, unto, and upon them (Williamson, 1964, p. 23).

Further to seeing God as the creator of all things (Williamson, 1964, p. 46), The Westminster Confession of Faith affirms that God is self-sufficient and relies in no way on creation (Williamson, 1964, p. 23).

It seems reasonable to say that the classical theist would affirm that God exists as a self-sufficient being, independent of creation[13]. As Flint points out, the Molinist largely aligns themselves with the classical theistic position and as a result it would not be unreasonable to affirm that God is seen by the Molinist as existing *a se* (Flint, 1998, p. 4-5).

A second reason to think that the Molinist wants to affirm God's aseity is that academics who have developed Molinism in the recent past have also affirmed

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[12] God is also affirmed here as being the creator of all things which exist apart from God, that is *extra se* (Craig, 2016, p. 205).

[13] Further study regarding what the Nicene church fathers likely held to be true has been done by Harry Austryn Wolfson, who concluded that the church fathers held that God alone is uncreated, nothing is co-eternal with God, and that eternality implies deity (Wolfson, 1970, p. 414).

the truth of the ontological argument for God's existence[14]. Alvin Plantinga, the person who reignited the discussion regarding Molinism and middle knowledge, reformulated the Ontological Argument when he wrote his book *The Nature of Necessity* (Plantinga, 1974b). A full exposition of Platinga's work would be impossible to include here, though a brief examination is called for. Plantinga's argument[15] looks like this:

(i) It is possible that a maximally great being exists.

(ii) If it is possible that a maximally great being exists, then a maximally great being exists in some possible world.

(iii) If a maximally great being exists in some possible world, then it exists in every possible world.

(iv) If a maximally great being exists in every possible world, then it exists in the actual world.

(v) If a maximally great being exists in the actual world, then a maximally great being exists.

(vi) Therefore, a maximally great being exists (Craig, 2008, p.184-185).

An immense amount could be, and indeed has been, said about this argument[16]. What Plantinga affirms from this argument is that God is a being who is maximally excellent in all possible ways. Plantinga takes this to require that

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[14] For example, Flint has defended the Ontological Argument as formulated by Alvin Plantinga in relation to God's free will (Flint, 1983), while William Lane Craig has fervently argued for God's existence whilst making use of the Ontological Argument for God's existence (Craig, 2008, p. 184-189)

[15] Plantinga's formulation of the argument is particularly excellent because (ii) - (v) are relatively uncontroversial. If we can affirm (i), the rest of the argument follows without much objection.

[16] Interested readers are referred to Plantinga's work on the matter (Plantinga, 1974b) and (Plantinga, 1974a)

God exhibit a number of great-making properties such as omniscience, omnipotence and moral perfection[17] (Craig, 2008, p. 184). Additionally, Plantinga extrapolates from this argument that a maximally excellent being exists necessarily (Plantinga, 1974a, p. 104-106) and therefore God exists necessarily.

For an object or entity to exist necessarily is to exist because it is the nature of that object or entity to exist, therefore for God to exist necessarily is for God to exist by God's nature (Gould, 2011a, p. 256).

A number of further things could be said to be true if the Ontological Argument is true. If any attribute can be thought of as being great making, God would have to be maximally excellent with respect to that attribute. For example, if it were better to be morally good, then God would have to be the maximally great being with respect to morality. Similarly, if it were the case that it were better to have knowledge, then it would have to be the case that God would be maximally great with respect to knowledge.

Furthermore, if God exists as a maximally great being by virtue of God's nature, then it follows that the actual world can in no way have influenced God's greatness. This is because God's nature dictates God's maximal greatness, not the actual world. Had the actual world been different, God's maximal greatness would not have been influenced. In addition, the Ontological Argument claims that God exists as maximally great in all possible worlds, but only our world is actual. Thus, we can say that God's maximal greatness cannot have been determined by the actual world – and as such God can be thought of as existing independently of creation.

Thus, if the Molinist is to follow in the footsteps of those who have recently developed the position whilst aligning themselves with the classical theist, the Molinist must affirm that God exists independently of creation, that God exists necessarily, that God exists by God's nature and that God exists self-sufficiently. The Molinist must then affirm God's aseity.

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[17] I have previously referred to this as omnibenevolence.

2.4 Libertarian Freedom

Another truth claim foundational to Molinist position is that some form of libertarian freedom is true for some or all of the creatures created by God. That is to say, some or all of the creatures created by God are afforded the opportunity to make some number of decisions which are self-determined. No minimum number of self-determined actions is set in this claim, just that free agents must be left to make at least one free choice in order to be considered both free and self determining.

Ken Perszyk minimally defines libertarian freedom as "the thesis that freedom is incompatible with (causal) determinism, plus the claim that at least some number of our actions are free" (Perszyk, 2013, p. 755). To consider this assertion in more detail, we should follow Thomas Flint's work on the matter and consider the following three propositional statements:

(1) Some human actions are free.

(2) All human actions are ultimately causally determined by events not under the causal control of their agents.

(3) It is not possible that a free human action be ultimately causally determined by events not under the causal control of its agent (Flint, 1998, p. 22-24)

Flint argues that (1) is relatively easily accepted on account of the fact that it seems to correspond with our experience of life. That is to say, we act in day to day life in a way which we seem to have chosen, when a different alternative seems to have been open to us. For example, I chose to engage in postgraduate studies when it at least seems as if I could have refrained from doing so. Thus, I take it that I was free to engage in postgraduate studies when I could have refrained from doing so.

This notion could be expanded in various ways - such as by stipulating that the notions of freedom and actions are intrinsically linked, or by proposing that at least some number of human actions are always free — but Flint takes the relatively conservative (1) to be sufficient (Flint, 1998, p. 23).

By (2), Flint means *the actions of all agents can always be found to exist as a result of a cause which was not controlled by the agent committing the action.* This can be rephrased to say *All agents act as a result of causes which exist beyond their control.*

A common argument in favour of (2) is as follows: Actions by humans are not random, but rather are caused by the reasons any given agent has acted — namely that agent's beliefs, desires and so on. Beliefs and desires are not things which spontaneously begin to exist in their current form within an agent — they must be caused too. As such, the causal chain which has necessitated any given action by an agent cannot be found to have begun within the agent. Rather, the origin of the causal chain must exist outside of the agent, either in other agents or external events — both of which the original agent has no control over (Flint, 1998, p. 22-23). On (2), all humans lack free will and all human actions are causally determined[18] by external sources and not the agent in question.

In the past many expanded (2) to be applicable to any given event which could be located in time[19]. This thesis, however, has been marginalised by recent developments in microphysics and quantum physics where theories related to quantum events being indeterminate have caused a decline in the number of proponents of (2) (Flint, 1998, p. 22-24).

Finally, Flint takes (3) to be quite plausible. By (3), Flint means to say *free actions must be caused by the agent committing those free actions* or *It is impossible for a free agent's free actions to be caused by anything other than the free agent in question.*

Flint sums this up by saying:

> For my act to be free, one is inclined to think, it has to be my action, not someone else's. Self-determination lies at the very

[18] The term causal determination should be understood as such: Event A can be said to causally determines a separate event B if it would be logically impossible for A to obtain and B not to obtain, given the laws of nature (Flint, 1998, p. 22).

[19] By this I mean to say, events located in time which are not necessarily related to an agent. Laws of nature, for example.

> heart of freedom; to say that an act of mine was free, but was ultimately determined by someone or something other than me, someone or something whose determining activity was utterly beyond my power to control, is to speak nonsense (Flint, 1998, p. 23).

This point is particularly important to understand. The root of freedom can be found in self-determination. Any free agent must have the capacity to self-determine by virtue of being free[20]. To assert that a free agent's free action was determined by something other than the agent is, as Flint says, "to speak nonsense" (Flint, 1998, p. 23). This does not mean that free agents cannot have some of their actions determined. What it does mean is that all of the free actions which free agents take find their cause in the agent in question.

These three propositional statements each possess individual merit but all three together are incoherent — the conjunction of any two precludes the third. This leaves us with three distinct positions to consider.

First, by rejecting (1) and retaining (2) and (3) we are left concluding that no human actions are free because all are determined. This view is called hard determinism[21] (van Inwagen, 1975, p. 185-187).

Second, by rejecting (2) and accepting (1) and (3), we are saying that some human actions have no determining source outside of the causal agent themselves. Thus, some human actions are free. This view is called libertarianism (Vallentyne, 2011).

Finally, we could reject (3) and be left with (1) and (2), leaving us to reject the incompatibility of determinism and freedom and affirm the concept of some human actions being free while all human actions are in some way determined. This view is called compatibilism (van Inwagen, 1985, p. 349-350; Flint, 1998, p. 22-24).

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[20] This does not mean that all actions by free agents must be free, just that the free actions of free agents must find their causal root within the agent in question.

[21] Peter van Inwagen defines determinism as "the thesis that the past and the laws of nature together determine a unique future, that only one future is consistent with the past and the laws of nature" (van Inwagen, 1989, p. 400).

While all three of the aforementioned positions may be viable for the theist[22], Molinism subscribes to libertarianism. The Molinist would assert that (1) — some number of our actions are free - and (3) — free human actions are caused by the agent in question - are true. As one would expect, libertarianism houses within itself a continuum of perspectives. Some, like Peter van Inwagen, believe that free actions exist but are rare (van Inwagen, 1989, p. 404) while others believe that almost all human actions are free. A specific or more detailed view on this matter is not necessary in order to assert or understand the Molinist position.

Having expanded on how the Molinist views both God's sovereign interaction with creation and libertarian freedom, we can clearly see that a conflict between these two issues exists. How could it be possible that God has any control over the actions of a free agent while those actions remain free? That is to say, how is it possible to assert that God is in control of all things in our world while simultaneously saying that at least some of the actions taken by agents are neither caused by God nor determined by the circumstances surrounding that agent? Does it not follow to say that by God allowing agents freedom, God is not in control of their actions?

This conflict is one which Molina had no qualm recognising, and the solution to this problem is the defining aspect of the doctrine of Molinism.

2.5 God's Knowledge

In this section, God's knowledge will be categorised and the categories will be related to one another. The concept of a possible world will be encountered and expanded upon in chapter three.

Molina stated clearly in Disputation 52, section 9 that he believed the answer to the divine sovereignty-human freedom conundrum could be found in understanding God's knowledge:

[22] Admittedly, hard determinism is rather challenging for the Christian to accept. On this view, agents would be determined to act in certain ways whilst simultaneously being held responsible for their actions (Flint, 1998, p. 24-27).

> Unless we want to wander about precariously in reconciling our freedom of choice and the contingency of things with divine foreknowledge, it is necessary for us to distinguish three types of knowledge in God (de Molina, 1988, p.168).

To consider God's types of knowledge, it is important to understand the relationship between God's foreknowledge[23] and the divine decree.

It seems clear that God's foreknowledge must, in some way, be related to and follow from God's sovereign decisions. God's knowledge of what will happen must follow from what God chooses to do[24]. Flint says of the relationship between God's will and God's knowledge:

> If it were not so dependent — if his decisions made no difference to his foreknowledge — then the notion of God's being in control of his world would clearly be a sham (Flint, 1998, p. 36).

God's foreknowledge, then, is at least partially determined by how God decides to act.

Let us consider God's foreknowledge in relation to God's divine decree — sometimes referred to as God's creative act of will (Campbell, 2006, p. 2-3). In choosing to create, God orders a specific number of creatures and puts them in a specific set of circumstances which thus leads to an innumerable number of successive temporal events and acts. Alvin Plantinga calls this God's *complete creative action* and takes it to mean God's complete act of causing[25] (Plantinga, 1974b, p. 173-181). Further, the Molinist takes the divine decree to be a free act, or an act volition (Flint, 1998, p. 37-38).

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[23] Flint takes God's foreknowledge to be God's certain knowledge of what will happen in our future (Flint, 1998, p. 12).

[24] That is to say, if God chooses to do something, God will know what will happen in the future on account of God having decided upon a course of action.

[25] God's complete creative action is to include all acts of causation for which God is responsible. Phrased this way, the Molinist is not required to affirm whether God causes all reality at any one time, or if God engages in ongoing creative action. Irrespective of whether God engages in an A-Theory of time or a B-Theory of time styled creative act, this creation

It seems clear that a significant amount of interplay between God's will and God's foreknowledge must exist such that a great deal of what God knows will occur is as a result of the divine will for that to occur. For example, suppose God chose to create a person at time *t*. In doing so, God knows that person will come to be at time *t*. Thus, "it is only subsequent to his performing his creative act of will that God has foreknowledge as to how things will actually be" (Flint, 1998, p. 37).

God's foreknowledge of how things will actually be, then, would exist after God's free divine decree and therefore could not have guided the complete creative action. That is to say, God's creative act of will determines what God foreknows will occur in the future. That is not to say that God's complete creative action is entirely uninformed. Rather, the divine decree would have been informed by the knowledge God possessed prior to the divine decree — knowledge made up of necessary truths (Campbell, 2006, p. 2).

These necessary truths — truths which exist apart from any decision — would have to exist as prevolitional knowledge[26] (Flint 1998:36-38). These prevolitional, necessary truths fall into the category of God's natural knowledge because they exist in the mind of the omniscient God "naturally and essentially" (Campbell, 2006, p. 2). Thus we can think of God's free choice to create as God's act of volition, with God's natural knowledge existing logically prior to this[27] (Flint, 1998, p. 37-38).

Expanding on the content of natural knowledge, Travis Campbell says:

> The divine natural knowledge comprehends every possible state-of-affairs that could obtain. In short, the natural knowledge of God comprehends the merely possible (Campbell, 2006, p. 2).

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would have a beginning point and would be both designed and decided upon logically prior to that beginning point. Readers interested in temporal becoming and theories of time are directed to Craig's book *Time and Eternity* (Craig, 2001).

[26] God has yet to take any creative action at this stage, so they must exist prevolitionally

[27] Or prevolitionally.

Therefore, God's natural knowledge also provides God with the knowledge of which worlds are possible[28].

As a result of the divine decree, God's knowledge transitions from knowing what is possible to knowing what is actual. This new knowledge informs God of which contingent[29] truths are now actual, thereby informing God of which possible truths are false[30] (Flint, 1998, p. 38). This knowledge is God's postvolitional knowledge and is made up of contingent truths which God has freely determined by the divine decree. Because this knowledge is freely determined, it is called God's free knowledge (Campbell, 2006, p. 2).

In summary, the Molinist takes God's decree to be both God's act of volition and God's complete creative act. God's complete creative act informs God's knowledge of what will happen. Prior to the divine decree, God possess natural knowledge – knowledge which is made up all necessary truths by which God is able to comprehend all possibilities. After God's divine decree, God's knowledge transitions from what is possible to what is actual. Because this happens as a result of God's free and complete act of creation God freely determines that which is actual. This is called God's free knowledge.

The aforementioned types of knowledge don't yet account for how God acts sovereignly. How does God have foreknowledge of or control over contingent events undetermined by God[31]? Flint gets at the heart of the matter when he asks:

> How does it assure him [God] knowledge or sovereignty with respect to those events involving non-divine beings that are not only

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[28] More will be discussed regarding the concept of possible worlds in the next chapter, for now we will continue to explore the types of God's knowledge.

[29] By contingent I mean that a statement is true in some possible worlds but not all possible worlds. In doing so, I concur with Paul Gould (Gould, 2014, p. 104), Plantinga (Plantinga, 1974b), William Lane Craig (Craig, 2008) and other philosophers.

[30] Not all possibilities would necessarily be actual in our world, thus some possible states of affairs would not be actual, and therefore they would be false.

[31] By this I mean the actions of free agents. These actions cannot be caused by God as they must find their cause within the free agent (Flint, 1998, p. 22-24).

> logically contingent, but causally contingent as well — that is, with respect to events that are not naturally necessary? (Flint, 1998, p. 38).

The Molinist view is that God's free knowledge and providence can only be present and exercised if God has complete knowledge of how free creatures will behave in any set of non-determining circumstances prior to the divine decree (Flint, 1998, p. 40).

That is to say, God can only have full and unfaltering knowledge of our present world whilst also possessing complete divine providence over our world if God has knowledge of how free creatures will behave when afforded freedom to choose in any specific set of circumstances.

This may be best demonstrated by means of an example. Suppose a free agent, we'll call this agent Maurice, could be placed in a set of circumstances where he is free to purchase a board game at time f in the future. On account of the fact that Maurice is a free agent, he has the power to choose whether he will or will not purchase the board game at time f.

It follows from this that there are two sets of possible worlds in which all the circumstances regarding Maurice's board gaming buying quandary are exactly the same, but the outcome would be different — either Maurice purchases the board game or he does not. Let's call the set of worlds where Maurice purchases the board game the P-worlds and the worlds in which he does not the R-worlds.

We now have a scenario where Maurice, as a free agent, is free with respect to purchasing a board game at time f in a specific set of circumstances. If Maurice chooses to purchase the board game, Maurice can be thought of as existing in a P-world. Simultaneously, if Maurice freely refrains from buying the board game, Maurice would exist in an R-world.

Through God's natural knowledge, God would know that both P-worlds and R-worlds are possible[32], but God would have no way of knowing what the out-

[32] For the sake of this argument, we will assume that both P-worlds and R-worlds are possible.

come of Maurice's decision would be if the set of circumstances at time f were to be actualised. That is to say, armed with natural knowledge, God would know that P-worlds and R-worlds are possible, but not have knowledge of how any free creature would behave when left free in a specific set of circumstances within those worlds – including Maurice.

Thus, if God were to, by creative act of will, actualise a world in which Maurice is presented with the board game buying quandary at time f, how would God know if the world actualised was from the P set of worlds or the R set of worlds?

Furthermore, if God doesn't have full knowledge of what Maurice will do in this situation, how could it be affirmed that God has complete free knowledge[33]?

The Molinist affirms that the only way for God to have complete free knowledge is if God has complete knowledge of how Maurice, or any other free and undetermined creature, will behave in any set of non-determining circumstances (Flint, 1998, p. 40).

Let's suppose that God knows that if Maurice is placed in a specific set of circumstances at time f he will freely purchase the board game. This means that God would know that if he brought about the aforementioned set of circumstances regarding Maurice's board game purchasing quandary at time f, a P-world would result. This merely means that one of the P-worlds would exist which isn't enough to say that God has complete free knowledge of the world actualised. God would need to know which of the P-worlds would exist in order for God to have complete free knowledge of the world actualised. In order to do this, God would have to know an innumerable number of other counterfactuals, similar in nature, about Maurice and all other undetermined beings (Flint, 1998, p. 38-41).

This is not a problem. As was noted at the beginning of this chapter[34] (Flint, 1998, p. 12-22), the Molinist believes that God's providential activity is not

[33] That is to say, how could it be possible that God could have complete foreknowledge but not know which world had been actualised?

[34] See the section called *Divine Providence*.

limited to Maurice or any one free agent. Rather, it is applicable to all free creatures God may create and put in any non-determining set of circumstances.

Furthermore, this knowledge must form part of the knowledge which informs God's divine decree so that God can have full control over creation and God's free knowledge, thus it must exist prior to the divine decree[35] (Flint, 1998, p. 39-40). Therefore, "there can be no time at which his [God's] decision concerning a complete creative action has not been made" (Flint, 1998, p. 40), which means that God must have known from eternity how Maurice, or any other free and undetermined creature God may create, would choose in any situation that creature may be placed and left free (Campbell, 2006, p. 3).

The way in which any free agent would choose to behave when put in a specific set of circumstances at a specific time — that is to say, where a complete set of non-determining circumstances can be specified into which a free agent could be placed placed — is called a counterfactual of creaturely freedom (Flint, 1998, p. 40). Campbell defines a counterfactual proposition as "a subjunctive conditional which presupposes the falsity of the antecedent" (Campbell, 2006, p. 4). More simply put, a counterfactual of creaturely freedom can be thought of as conditional propositions stating "how any creature God might create would freely behave in any set of circumstances in which that creature might be created and left free" (Perszyk, 2013, p. 755).

An example of a counterfactual of creaturely freedom could be "If Maurice were put in a specific set of circumstances C at time f, Maurice would choose to purchase a board game." It is this knowledge which the Molinist believes God would have to have prior to the divine decree in order for God to have complete providential control over any world actualised by God. Thus, we can say that the Molinist believes that in order for us to say that God has divine providential control of our world, prior to the divine decree God must possess knowledge of all true subjunctive conditionals. In addition, God must possess knowledge of all necessary truth through which God comprehends all which is possible (Flint, 1998, p. 36-40).

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[35] God must know which of the sets of worlds God is creating if God is to have full control over the world being created, therefore God must know how free creatures will decide prior to the divine decree.

At the same time, the Molinist affirms that none of this infringes on the freedom of the creatures being created. As Flint says:

> Provided that God has knowledge of all the true counterfactuals of creaturely freedom, there is no problem with either his exercise of providential control over his world or his possession of free knowledge (Flint, 1998, p. 40).

On this view, God is in no way determining an agent's decisions. Irrespective of whether God holds knowledge of how Maurice would choose, for example, Maurice remains free to choose whether to purchase or to refrain from purchasing the board game when put in a set of circumstances C at time f (Flint, 1998, p. 39-40).

Molina held that knowledge of counterfactuals of creaturely freedom could not form part of God's natural knowledge or part of God's free knowledge. God's free knowledge is God's knowledge of contingent truths which God controls and has freely determined by means of God's divine decree. God's natural knowledge is made up of necessary truth which God does not control. Knowledge of how free creatures would freely choose when placed in a set of non-determining circumstances must take the form of contingent propositions which can't be controlled by God (Flint, 1998, p. 38-41).

With respect to the decisions of free creatures, counterfactuals of creaturely freedom must take the form of contingent propositions which are determined by the free agents themselves and not by God (Perszyk, 2013, p. 755-756). This knowledge cannot form a part of God's natural knowledge, because it is not necessarily true[36]. Additionally, this knowledge exists prior to the divine decree and as such cannot form a part of God's postvolitional free knowledge (Flint, 1998, p. 38-41).

This knowledge, instead, forms a part of God's middle knowledge — aptly named because it is said to exist between God's natural and free knowledge (Perszyk, 2013, p. 755-756).

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[36] The free agent in question must have been able to choose from some number of actions in order to be considered free.

To understand how God's middle knowledge solves the problem of foreknowledge and sovereignty, Flint suggests we picture the three types of God's knowledge within a growing narrative. First, God has knowledge of all necessary truths through God's natural knowledge. Second, God has knowledge of all contingent truths not under God's control by means of middle knowledge. Through the combination of natural and middle knowledge, God has perfect knowledge of what would occur as a result of any creative act (Campbell, 2006, p. 1-3). Third, God chooses a creative act of will, thereby determining "not only all the contingent creaturely events ultimately precipitated by God's creative action" but also the content of all contingent truths God controls — that which constitutes God's free knowledge (Flint 1998:43).

2.6 Conclusion

This chapter began by defining three fundamental pillars the argument presented in this work: God's attributes of divine providence and aseity, and human free will. The Molinist affirms all three of these, but in affirming divine providence and human free will, a tension is found. To overcome this obstacle, God's knowledge is considered.

Natural knowledge and free knowledge are related to God's divine will, with free knowledge said to exist after God's divine decree (Flint, 1998, p. 37-38). Thus, God's divine decree can only be informed by God's natural knowledge. The Molinist affirms that this is not enough for divine providence, as defined, to exist, showing that God requires additional information if God's will is to be adequately informed. To bridge this gap, the Molinist affirms God's middle knowledge (Flint, 1998, p. 40).

One final aspect must be considered when considering the Molinist solution - namely the possible worlds which Flint, Perszyk and Plantinga have spoken about.

Chapter 3

Possible Worlds and Campbell's Objection

3.1 Introduction

Having briefly explored what the Molinist believes, attention is now turned to understanding how this new structure of God's knowledge outwardly works itself through the concept of a possible world. In encountering possible worlds, we find the objection to God's middle knowledge which Travis Campbell raises — a potential roadblock in adopting the doctrine of Molinism.

3.2 Possible Worlds

Understanding the make up of a possible world is very important if we are to understand one of the traditional objections to Molinism. In this section, the idea of a possible world will be defined, with special attention paid to the relationship between possible worlds and middle knowledge.

As was noted in the previous chapter, counterfactuals of creaturely freedom, middle knowledge and Molinism were brought to the attention of English speaking philosophers during the 1970s by Alvin Plantinga when he set about attempting to logically address the problem of evil (Plantinga, 1974b).

As a part of his solution, Plantinga explores the concept of a possible world[1]. Plantinga says that a possible world is "a way things could have been" (Plantinga, 1976, p. 139) or a state of affairs of some kind, where a state of affairs can be defined as a propositional statement describing a reality in some sense[2] (Plantinga, 1974a, p. 34-35).

So, Plantinga says that we can think of a state of affairs as being a description of a world[3]. And for each state of affairs, there exists a propositional statement

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[1] Peter van Inwagen (van Inwagen, 1986) differentiates between two conceptions of possible worlds with respect to states of affairs: Abstractionism and Concretism (van Inwagen, 1986, p. 185-187). Plantinga's view of possible worlds is the Abstractionist view, on which possible worlds are abstract objects with states of affairs making up the building blocks which define any given possible world. David Lewis promulgates a Concretist conception of a possible world in affirming that every object within a world is taken to be spaciotemporally related to the other objects within that world as well as the world itself. On the Concretist view, there are no impossible worlds and all possibilities are realities in some world. Our world is thought of as simply being where we are located (Lewis, 1986, p. 69-70). The Concretist view holds that all possible worlds are actually concrete realities which actually exist in the same way which our world exists. The Concretist view also holds that all of these realities exist simultaneously whilst being distinct from one another (Lewis, 1986, p. 1). Plantinga's Abstractionist view of possible worlds has been criticised by Christopher Menzel (Menzel, 1989) for lacking adequate formal rigor. A second objection to Plantinga's view has been detailed by John Divers (Divers, 2002), who claims that the structure of possible worlds as promulgated by Plantinga is in violation of Cantor's Theorem. Lewis' Concretist view of possible worlds also has trouble with Cantor's theorem, with David Kaplan (Kaplan, 1995) arguing as follows: If it is true that for any given proposition p at any given time t, it is possible that only one person is entertaining p, then it follows that for every proposition there must be one unique world – thus there have to be at least as many worlds as there are propositions. But if every set of worlds is a proposition, by Cantor's Theorem we can say that there would be more propositions than worlds, resulting in an internal contradiction (Kaplan, 1995, p. 42-44). A further objection to Lewis' view is that, on this view, there is space for only one necessary truth (Lewis, 1986, p. 55-59). This seems to be intrinsically problematic, as it seems to be clearly the case that more than just one proposition would be necessarily true, though it should be noted that Lewis takes this characteristic of his view to be a strength. Readers interested in these objections are referred to the cited material.

[2] In this regard, Plantinga concurs with David Lewis (Lewis, 1973).

[3] Plantinga's usage of the term "state of affairs" is completely different to the way in which David Armstrong (Armstrong, 1993) uses the term. Armstrong takes a state of affairs to

which describes that world. A state of affairs can be actual, in which case that state of affairs is said to obtain. When a state of affairs is actual, we can say that the propositional statement which corresponds with that state of affairs is true[4] (Plantinga, 1974a, p. 34-35).

Plantinga defines a state of affairs in further detail when he says:

> A proposition p corresponds to a state of affairs s, in this sense, if it is impossible that p be true and s fail to obtain and impossible that s obtain and p fail to be true (Plantinga, 1974a, p. 35).

To be clear, on Plantiga's view possible worlds are thought of as descriptions of the way reality could be. These descriptions take the form of states of affairs, so that a possible world is made up of a very large of states of affairs. Additionally, each actual state of affairs has corresponding with it a proposition which can be said to be true. In the event that a state of affairs can be said to obtain, that state of affairs can be said to be actual. In the event that a state of affairs is actual, the proposition which corresponds with that state of affairs can be said to be true (Plantinga, 1974a, p. 34-35).

It is important to point out that just as there can be false propositions, so too can there be false states of affairs. That is to say, in the same way that propositional statements could exist while not being actual[5], a state of affairs could exist without needing be true. Thus, false states of affairs could exist[6]. Therefore, we can consider a possible world to be a possible state of affairs which could obtain but does not need to (Plantinga, 1974a, p. 35).

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refer exclusively to facts.

[4] For example, it is an actual state of affairs that "2 + 3 = 5". Therefore, the proposition "2 + 3 = 5" corresponds with the aforementioned state of affairs and can be thought to be true.

[5] For example, I could make the necessarily false propositional statement "Bachelor b is married." It is possible for this propositional statement to exist whilst being false.

[6] A necessarily false state of affairs could be something like "2 + 3 = 23". It could be possible for this state of affairs to exist, but it could never obtain.

All of this is to say that states of affairs need not exist necessarily. It is possible that a state of affairs exist necessarily, but states of affairs are not necessarily taken to exist necessarily. In fact, the vast majority of states of affairs are considered to be contingent on Plantinga's view.

It follows then that amongst the range of possible worlds, our world is one and by virtue of being actual our world obtains (Plantinga, 1974a, p. 34-38).

William Lane Craig defines a possible world as "a maximal description of reality, or a way reality might be" (Craig, 2008, p. 183). Craig suggests that the best way to think of possible worlds is as "huge conjunctions p&q&r&s..., whose individual conjuncts are the propositions p, q, r, s...." (Craig, 2008, p. 183). A possible world would then be a collection of propositions which would each individually make a claim and when put together, would maximally describe a possible world. To maximally describe a possible world is to provide a description of a world where the addition of any further descriptive propositional statements would either be tautological or would change some aspect of that world (Plantinga, 1974a, p. 36).

Additionally, Craig stipulates that in order to be considered a maximal description of reality, these conjunctions would need to be made up of both propositions and their contradictory so that nothing is omitted from the description of a possible world (Craig, 2008, p. 183).

Consider this example proposed by Plantinga (Plantinga, 1974a, p. 35-36): *Jim Whittaker was the first American to climb Mount Everest.*

In order for this proposition to be true, the following propositions would also need to be true:

> *Jim Whittaker is American.*
>
> *Mount Everest can be climbed.*
>
> *No American climbed Mount Everest before Jim Whittaker.*

and so on.

We can then say that in order for a possible world to be a maximal description, states of affairs must include any further states of affairs which are either

logically necessarily true or logically necessarily false (Plantinga, 1974a, p. 35-36).

In the example above, it follows from saying that "Jim Whittaker was the first American to climb Mount Everest" that "Jim Whittaker is American." Similarly, the converse applies so that in saying "Mount Everest can be climbed" one could not go on to say "Mount Everest cannot be climbed."

Furthermore, in the event that a state of affairs A obtains and in doing so precludes a state of affairs B — or vice versa - the conjunctive state of affairs A and B is impossible. For example, it is impossible that both "Jim Whittaker is the first American to climb Mount Everest" and "Ronald Reagan is the first American to climb Mount Everest" be true at the same time (Plantinga, 1974a, p. 35-36).

Thus, "If A precludes B, then A's corresponding proposition entails the denial of the one corresponding to B" (Plantinga, 1974a, p. 36).

Naturally, what is true of states of affairs must be replicated with respect to their corresponding propositions. As Plantinga says:

> Inclusion among states of affairs is like entailment among propositions; and where a state of affairs A includes a state of affairs B, the proposition corresponding to A entails the one corresponding to B (Plantinga, 1974a, p. 35).

With all of this in mind, we can define a state of affairs as being complete if it includes a proposition A as well as all propositions which are logically necessary for A to obtain and all propositions which are logically negated by A obtaining (Plantinga, 1974a, p. 36). Plantinga concurs with Craig when he defines a possible world by saying:

> A possible world is any possible state of affairs that is complete. If A is a possible world, then it says something about everything; every state of affairs S is either included in or precluded by it (Plantinga, 1974a, p. 36).

In summary, the view promulgated by Plantinga and Craig affirms that possible worlds are best thought of as a huge and complete state of affairs by which a maximal description of reality is achieved. This state of affairs would be maximally descriptive if, and only if, by adding to this description the description either changed or became tautologous. Furthermore, this state of affairs would be required to include all logically necessary states of affairs and logically negated states of affairs, thereby making the state of affairs complete. Finally, the state of affairs describing a possible world must include a corresponding proposition, describing the state of affairs (Plantinga, 1974a, p. 34-39).

A number of further things can be said of possible worlds. Suppose we have a number of possible worlds, each made up of a seemingly infinite — though not actually infinite — number of propositions which form conjunctions to maximally describe the aforementioned possible world. Now suppose we have a proposition N which is necessarily true and is contained in God's natural knowledge[7]. The proposition N would then exist as a true proposition in all possible worlds because it is a necessary truth (Plantinga, 1976, p. 140).

Similarly, if a proposition Q exists and is true in all possible worlds, we can say that Q is a necessary propositional truth because all necessary truths exist as necessary truth in all possible worlds[8] (Plantinga, 1974a, p. 37).

Plantinga also says of possible worlds that "people (and other things) exist in them" (Plantinga, 1974a, p. 37). Plantinga qualifies this by saying that we obviously exist in this actual world but also that any person exists in any world W where, had world W been actual, that person would have existed[9].

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[7] For example, "All bachelors are unmarried."

[8] If it were to be necessarily true that "$2 + 3 = 5$", then it would be the case that the proposition "$2 + 3 = 5$" must be true in all possible worlds in addition to being contained in God's natural knowledge (Campbell, 2006, p. 2).

[9] Speaking meaningfully of non-existent entities is notoriously challenging. Flint suggests that the way to overcome this issue is to think of reference to entities or objects which belong to possible worlds as propositions which refer to the "essence" of a creature rather than the creature itself (Flint, 1998, p. 47). On this view, in saying that a person or an object exists within a possible world, we are not referring to the object or the person and

For example, if Maurice were to exist in world W, then Maurice would exist in that world and be actual if that world were actual. In saying that a person, for example, exists in a world we are not saying that person is actual, but rather that the person forms a part of the maximal conjunctive description of the possible world in question (Plantinga, 1974a, p. 37-38). It follows, then, that Maurice exists in all possible worlds where the proposition "Maurice exists" is part of the maximal conjunctive description of that world (Plantinga, 1974a, p. 37-38).

Finally, a brief word must be devoted to the concept of a proposition. The Stanford Encyclopedia of Philosophy provides the following advice:

> The best way to proceed, when dealing with quasi-technical words like *proposition*, may be to stipulate a definition and proceed with caution, making sure not to close off any substantive issues by definition fiat (McGrath, 2014).

Heeding this advice, we can look to Plantinga for a general idea of what he means when he speaks of propositions.

Plantinga defines propositions as being "the sorts of things sentences are used to express and assert" (Plantinga, 1974a, p. 38). That is to say, Plantinga takes a proposition to be the semantic content of a sentence – a common way to treat propositions[10] (McGrath, 2014). On this view, we can derive propositions from sentences by understanding the semantic value of a sentence.

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we are using the term in a lightweight, non-ontologically committing sense. More will be discussed on this point in the coming chapters.

[10]David Lewis (Lewis, 1980) believes that this is not an appropriate way to think of propositions, arguing as follows: Consider the sentence "In the past, Reagan was president." This sentence seems to only be true if it is also true that Reagan was the president at some stage prior to when that sentence was asserted. However, if this is true, then the truth value of this sentence must change over time. If the sentence in question can change its truth value over time, then it would seem to lack temporal qualification. A similar objection is relevant when applied to sentences pertaining to location based assertions like "In Cape Town, it is windy." Lewis takes it to be the case that propositions must be qualified with respect to spatial or temporal values. Lewis also believes that sentences cannot contain spatial or temporal quantification. If the aforementioned is true, then it seems to be the

As such, the same sentence can be used to express different propositions, but it is the proposition which is important to the make-up of possible worlds. Conversely, when we describe propositions, we make use of sentences to convey the semantic value which corresponds with the proposition in question.

So for example, the sentence "Maurice exists" could be used to speak of multiple different people, but the proposition "Maurice exists" would refer to one very specific person[11].

Possible worlds can then be thought of as a state of affairs, to which a proposition corresponds. That proposition is made up of individual propositions which, when joined together, describes a world maximally. Our world is one of these possible worlds and can be thought of as being actual.

3.3 The Molinist Solution

This section will show how the Molinist intends to tie the various aspects of God's knowledge together and, along with the concept of a possible world, solve the problem raised by the conjunction of God's divine attributes and creaturely libertarian freedom.

At this stage it is clear to see how Molinists believe God's middle knowledge ties in with God's omnibenevolence to benefit creation as a whole. Through

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case that the semantic content of sentences cannot be taken to be propositions (McGrath, 2014). Jeffrey King (King, 2003) has made use of work in linguistics to criticise Lewis' position by arguing that sentences can include spacial or temporal quantifiers. On King's view, to say something like "Somewhere it is raining" is to say "There is a location L such that it is raining at L." King argues that the same could be said regarding temporal quantification (McGrath, 2014). Thus, on King's view, Lewis' objection is negated because we can take the semantic content of sentences to include the required information in order for the meaning of those sentences to constitute a proposition (McGrath, 2014). A number of other people have also criticised Lewis' argument including Mark Richard (Richard, 1982), Nathan Salmon (Salmon, 1989) and more recently Herman Cappelen and John Hawthorne (Cappelen & Hawthorne, 2009). Clearly a number of different views exist regarding whether it is suitable or not to take the semantic content of sentences as constituting propositions. Interested readers are referred to the aforementioned material.

[11] The view of propositions which Plantinga has affirmed is shared by Molinists such as Thomas Flint (Flint, 1998) and William Lane Craig (Craig, 2013).

God's prevolitional natural knowledge, necessary truths are known. As a result of God's middle knowledge, God has knowledge of all contingent, subjunctive conditional not under God's control. As a result, God can foreknow how any free agent will freely choose when put in any given set of circumstances were God to create that free agent.

Ken Perszyk confirms this when, in summarising the Molinist position, he says:

> But armed with the notion of middle knowledge, Molinism (allegedly) provides an ingenious solution to these problems. God's creative decisions are guided by his middle knowledge of CCFs. Since he has no control over their truth values, it is not up to him which worlds are open to him to create. But which of the worlds open to him is actual is completely up to him. (Perszyk, 2013, p. 755-756).

God knows all necessary truths and all possibilities by means of God's natural knowledge (Campbell, 2006, p. 2). Thus, through God's natural knowledge, God comprehends all possible worlds. Through God's middle knowledge, God knows all contingent truths which exist outside of God's control[12] (Flint, 1998, p. 41-43). By God being able to draw on both natural and middle knowledge, God's decree can be both shaped and guided such that God is empowered to actualise a world which perfectly corresponds with the divine will without infringing on the free will of free creatures (Flint, 1998, p. 43-45).

Perszyk goes on to say:

> Since he knows by middle knowledge what each creature he might create would do in any possible situation in which that creature were placed and left free, he knows what he has to do to get the world (from within the set open to him) that he wants. By selecting the 'right' combination of creatures to create and circumstances in which they are placed — i.e. by actualizing the 'right' set of

[12] Such as, for example, counterfactuals of creaturely freedom (Flint, 1998, p.41-43).

> antecedents of CCFs — God calls the shots by deciding which world open to him is actual (Perszyk, 2013, p. 755-756).

Perszyk points out that the Molinist does not believe that God is able to create any world. Naturally, worlds which are not possible cannot be created by God. Similarly, in affording creatures freedom, and with God having certain foreknowledge of how these free creatures would act under certain circumstances, options for which worlds are *feasible*[13] for to God to create are produced (Flint, 1998, p. 46-59).

For example, suppose Maurice were to be a free agent who is free to purchase a board game at a time f if placed in a set of circumstances C. Through God's middle knowledge, God would know if Maurice would freely choose to purchase the board game or if Maurice were to freely refrain from purchasing the board game if Maurice were to find himself free to choose in C at f. Now suppose that through this knowledge, God knows that Maurice would in fact choose to purchase the board game.

While it would be possible for God to actualise a world in which Maurice refrains from purchasing the board game in C at f, doing so is not considered feasible for God (Flint, 1998, p. 51-54). This is because if God were to actualise a world in which Maurice refrains from purchasing the board game in C at f, while knowing that had Maurice remained free Maurice would have instead chosen to purchase the board game, God is no longer actualising a world in which Maurice is free. God has instead actualised a world in which Maurice is *not* free with respect to purchasing a board game in C at f.

Thus God is restricted to creating only feasible worlds due to the limitations which arise by affording creatures free will[14] (Flint, 1998, p. 51-54).

The Molinist contends that by endowing God with middle knowledge, God is free to create while at no point infringing upon any free creature's capacity to

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[13] Thomas Flint was the first to promulgate the concept of a feasible world in his works *Divine Freedom* (Flint, 1980) and *The Problem of Divine Freedom* (Flint, 1983).

[14] A similar argument will be examined towards the end of this chapter.

make free decisions. In this example, Maurice, as a free agent, continues to find himself free in the possible world in question.

At the same time, through the freedom which God freely bestows upon created agents, logical limitations are promulgated and the range of possible worlds from which God could choose to create becomes limited to a number of feasible worlds from which God could choose to create (Flint, 1998, p. 46-54).

Thus, prior to the divine decree, God knows which worlds are possible from a range of seemingly infinite worlds, and what will ultimately happen if any specific possible world were to be actualised. This allows God to know which worlds are feasible, thereby giving God the ability to freely choose to create one of the many feasible worlds. The Molinist claims that by God having middle knowledge, God is able to simultaneously exercise perfect sovereignty over all things while affording libertarian free will to the creatures God creates.

Perszyk illustrates this final point by saying:

> In this way, middle knowledge allows us to explain how God can exercise complete and specific sovereignty over creation even if there are (libertarian) free creatures. His providential plan for the world is thus guaranteed to succeed even though creatures are free to do otherwise in the circumstances in which they choose or act. (Perszyk, 2013, p. 755-756).

This Molinist solution has been applied to various aspects of theology and has been used to promulgate theories and solutions to a wide array of topics such as Christology (Flint, 2001), Soteriology (Rea, 2007), the inspiration of scripture (Craig, 1999) and many more.

3.4 Campbell's Objection

In this section, an objection to middle knowledge and the doctrine of Molinism which was raised by Travis Campbell is introduced. Campbell's objection draws on an older objection which was vocalised by Reginald Garrigou-Lagrange, with Garrigou-Lagrange's objection addressed in this chapter. Camp-

bell's objection is the core issue to be addressed in this work and is focused on in subsequent chapters.

Travis Campbell (Campbell, 2006) objects to Molinism by claiming that by postulating middle knowledge, Molinism compromises the aseity, or self existence, of God. In expounding upon his objection, Campbell defines God's aseity when he says:

> When we say that God is self-existent, we mean to say all of the following: that he is pure actuality (there is no potentiality [or passive potency] in his being); that he is wholly independent and uncaused; that he is his act of existing; and so forth (Campbell 2006:16).

In affirming this, Campbell largely concurs with the Molinist by saying that God is self-existent, that God is God's own act of existing, that God is wholly independent and that God exists uncaused[15].

Campbell, however, claims that this is not compatible with the middle knowledge promulgated by Molinism. In giving God middle knowledge, the Molinist is saying that some amount of God's knowledge is not self-determined[16]. God's knowledge of creaturely counterfactuals, for example, is determined by agents who exist apart from God - the free creatures themselves - and not God. That is to say, prior to the divine decree, God knows how any free creature would act were that creature to be placed in any particular set of circumstances on account of the fact that the, currently uncreated, free creature would in fact act in that way[17] (Campbell, 2006, p.16-17).

Campbell claims that the dependency created by relying on an external source to complete some amount of God's knowledge introduces passive potency, thereby making "God (or, at least, some aspect of him) something less than

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[15] See the section called *Divine Aseity* in Chapter 2.

[16] That is to say, some amount of God's knowledge is not determined by God.

[17] In affirming libertarian free will, it seems to be the case that the Molinist would concur with this objection.

absolutely independent" (Campbell, 2006, p. 16). This dependency, in Campbell's view, undercuts God's aseity and as such one must decide: either God has middle knowledge or God is wholly self-existent (Campbell, 2006, p. 16-19).

Campbell's objection is not entirely new[18]. Initially raised by the neo-Thomist Reginald Garrigou-Lagrange, this view of middle knowledge and passivity it introduces into God's knowledge is based on the view that "divine knowledge is the cause of its objects of knowledge" (Craig, 1991, p. 270). As a Thomist, Garrigou-Lagrange believed that this necessitates God must determine the truth value of all propositions known to God on account of God being First Cause and Pure Actuality (Craig, 1991, p. 270).

We can rephrase Garrigo-Lagrange's objection as such: As First Cause and Pure Actuality, all things known to God must find their cause in God. None of God's knowledge can find its source in an external agent. By the Molinist proposing middle knowledge, some amount of God's knowledge no longer finds its cause within God, thereby introducing passivity into God.

In a debate with the Molinist Adhmar d' Als, Garrigou-Lagrange made his point when he argued that middle knowledge creates an exception to divine universal causality and introduces passivity into God because future contingents are determined by agents outside of God (Craig, 1991, p. 270).

Garrigou-Lagrange made this point clear when he said:

> It is because in God alone essence and existence are identical, because He alone is Being itself that we must conclude that only in Him can there be no accident, that He alone is infinite, that nothing that is external to Him can exist unless it has been created and preserved in being by Him, that nothing external to Him can act without the divine motion. Action, in fact, presupposes being, and the mode of the action corresponds to the mode of the being that is in action. God alone, who is His existence, who is Being itself, is

[18] In publishing his objection to middle knowledge, Campbell underpins his objection by drawing on Reginald Garrigou-Lagrange's objection. The two are not the same, but Campbell certainly sees them as being linked (Campbell, 2006, p. 16-19).

> consequently action itself, intellection itself, love that is itself eternally subsisting. On the other hand, no creature, however perfect it may be, since it is not its existence, is not its own thought and will; but the most perfect angel, just as the least endowed human soul, always is in need of the divine motion in order to think and will anything whatever. Nothing, consequently, escapes the divine motion except evil, which, being a defect, presupposes only a deficient cause. It cannot come from God, but is permitted by Him, because He is powerful enough and good enough to draw from it a greater good that is known to Him, a glimpse of which is at times given to us (Garrigou-Lagrange, 1934, p. 557-558).

Garrigou-Lagrange makes a number of points in this exchange. First, he believes that all things flow from God and are sustained by God. Garrigou-Lagrange extends this to mean that all things which exist move only as prompted by God, thereby denying the libertarian free will which the Molinist affirms[19]. Garrigou-Lagrange goes on to affirm his view that God is self-sufficient and pure existence. In this, he believes that God is set apart from all other entities or beings. Garrigou-Lagrange further reiterates his view that God instigates action in external agents, although Garrigou-Lagrange does not believe that evil is motivated by the divine will.

Garrigou-Lagrange held that God causes all the actions of free creatures and as such, causes all things to happen. In knowing the the divine decree, God knows all conditional future contingents and thus "divine knowledge is the cause of its objects of knowledge" (Craig, 1991, p. 270-271). Furthermore, Garrigou-Lagrange would affirm that because the divine will moves agents to act, by creating God determines all actual contingents.

This led Garrigou-Lagrange to conclude:

> God determines or he is determined, there is no in-between; either things are the measure of the knowledge of free futuribles or else

[19] See the section called *Libertarian Freedom* in Chapter 2.

> it is their measure by reason of the decree of the divine will which accompanies it (Philips, 1964, p. 325).

Dieu determinant ou déterminé: either God determines all things or God is determined. This can be rephrased as *either God determines the content of God's knowledge, or God's knowledge – and subsequently an aspect of God – is determined without God's control.*

Garrigou-Lagrange clarified this by saying:

> Either God's knowledge is the cause of our free determinations or else it is caused by them because Peter would choose, if he were placed in certain circumstances, and because he will in fact choose when he will be so placed (Philips, 1964, p. 325).

Here, Garrigou-Lagrange is saying that either Peter's "free determinations" are determined by God's knowledge, or God's knowledge is caused by how Peter would choose were Peter to be placed in a set of circumstances and left free with respect to a specific choice. In saying this, Garrigou-Lagrange is specifying his qualm lies with the Molinist's claim with respect to how God's middle knowledge – made up of prevolitional, contingent subjunctive conditionals – interacts with God's capacity to actualise any possible world.

Garrigou-Lagrange believed that in asserting that God is self-sufficient, it is impossible for external agents to causally determine their own actions in any way. To assert the latter would result in detracting from the former (Campbell, 2006, p. 16-17).

In responding to this objection, William Lane Craig recognises its validity but denies it lacks the weight required to damage the Molinist's position:

> That leads to the second half of Garrigou-Lagrange's objection, that middle knowledge posits passivity in God. Despite Molinist protests, I think we shall have to admit that this is true. But at the same time, as I said above, this seems to me of no great consequence (Craig, 1991, p. 272).

Craig rightly acknowledges this problem on account of the fact that, on the Molinist view, counterfactuals of creaturely freedom exist as propositions and their truth values are determined by free creatures themselves and not by God. Thus, God's middle knowledge is made up of contingent propositions which are not determined by God. In this respect, it appears as if the objection is unavoidable. Speaking of how middle knowledge is, at least partially, determined by free creatures, Campbell points out that "every doctrine of middle knowledge one encounters in the literature implies this" (Campbell, 2006, p. 16).

Craig seeks to devalue this objection by arguing that God's foreknowledge is determined by what will occur:

> God's simple foreknowledge can be understood as determined in its content by what will in fact occur. This sort of determinacy or passivity on God's part seems to me altogether innocuous, and if this sacrifices the Thomistic view of God as Pure Actuality, then so be it (Craig, 1991, p. 272).

Craig argues here that God's prevolitional knowledge of contingent subjunctive conditionals is simply that – knowledge of contingent subjunctive conditionals. It may be true that God does not determine these, but is also true that these will occur only if God actualises the requisite possible world. On Craig's view, if this detracts from God's Pure Actuality as understood on Thomism, "then so be it" (Craig, 1991, p. 272).

Nevertheless, Craig has a further response to this objection. Craig claims that by making God responsible for both the truth of future contingent propositions and the truth of counterfactuals of creaturely freedom, human freedom is denied and God is made to be the author of sin (Craig, 1991, p. 272-273). Could it not be the case that God's omnipotence is enough to overcome this challenge[20]?

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[20]That is to say, if God is omnipotent, would it not be possible for God to be able to overcome the challenge of both determining God's knowledge whilst not affirming determinism?

Thomas Flint and Alfred Freddoso (Flint & Freddoso, 1983) propose that the the problem should be considered from the perspective of God's power[21] and how any decision made by God might consequentially provide a logical limitation for God. Flint and Freddoso provide the following example (Flint & Freddoso, 1983, p. 93-98). Consider the following situation:

Suppose a non-omnipotent and free agent called Jones is placed in a set of circumstances C such that he is free with respect to writing a letter to his wife at a time t. If this is the case, in the set of circumstances C at time t, Jones has the power to actualise one of the following:

(1) In C at t Jones freely decides to write a letter to his wife.

(2) In C at t Jones freely decides to refrain from writing a letter to his wife (Flint & Freddoso, 1983, p. 94-95).

We can clearly see that (1) and (2) are diametrically opposed to one another and as such it is impossible for both (1) and (2) to simultaneously obtain in the set of circumstances C at time t. That is to say, it is impossible for Jones to be in C at t and freely choose to both write a letter to his wife while freely refraining from writing a letter to his wife.

Furthermore, Jones is a free agent. As such, no one apart from Jones can at time t have the power to actualise (1) while also having the power to actualise (2) (Flint, 1998, p. 23). Thus in the set of circumstances C at time t, only one of the following can be true of Jones:

(3) If Jones were in C at t he would freely decide to write a letter to his wife.

(4) If Jones were in C at t he would freely decide to refrain from writing a letter to his wife (Flint & Freddoso, 1983, p. 94-95).

As a free agent, only Jones has the power to determine whether (3) or (4) is true. Even God's omnipotence is not enough for God to be able to simply

[21] I have previously referred to this as God's omnipotence.

decree which state of affairs should come about, and as a results God does not have the power to actualise every state of affairs[22]. This should be taken to mean that God could freely choose to actualise C at time t, placing Jones in C at time t, but when doing this God could not choose whether (1) or (2) would obtain.

For example, if (3) were true, then God could actualise the set of circumstances C at time t but God would be unable to bring about (2) because Jones in C at t would freely decide to write a letter to his wife. The converse is similarly true. If (4) were to be true, God could actualise the set of circumstances C at time t but would be unable to actualise (1) (Craig, 1991, p. 273).

If God were to create Jones in the same set of circumstances C at the same time t, but Jones were not free with respect to writing a letter to his wife, then God could choose to actualise a world where either Jones would choose to write a letter to his wife or where Jones would refrain from writing a letter to his wife. Thus, it would only be possible for God to choose which state of affairs God wanted to actualise if God were to deny Jones freedom (Craig, 1991, p. 273).

And because all of this results "solely from the *logically necessary* truth that one being cannot causally determine how another will freely act" (Flint & Freddoso, 1983, p. 95), this should not be viewed as anything which detracts from God's omnipotence in any way[23].

Craig readily admits that on the Molinist view, the problem of detraction from God's pure actuality as understood by Garrigou-Lagrange and Campbell persists (Craig, 1991, p. 274). Having said that, in viewing this limitation as being a logical one, God's omnipotence is not any more restricted that it is by saying that God could not create a married bachelor, for example.

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[22] The Molinist claims that God can create an world which is feasible, not that God can create any world.

[23] Suppose for example that God had chosen to create agents which were not free. Were that to be the case, God would not be restricted in the same way.

3.5 Conclusion

In this chapter, the concept of a possible world was introduced. States of affairs and propositions were discussed, with possible worlds being taken to be abstract in nature and operating as maximal descriptions of any potential reality (Craig, 2008, p. 183-184). The Molinist makes use of these possible worlds to show that, through middle knowledge, God would have all the adequate information required to make a maximally informed decision when choosing to create (Perszyk, 2013, p. 755-756). By having this knowledge, God is able to create a world in which everything which happens is actively chosen by God whilst being able to create creatures who are free with respect to their free choices (Flint, 1998, p. 40).

Travis Campbell's objection to Molinism and middle knowledge was then established (Campbell, 2006, p. 16-19), with Campbell claiming that middle knowledge requires God to look outside of the triune Godhead in order to complete God's middle knoweldge. Campbell's objection, while distinct, draws on the objection raised by Reginald Garrigou-Lagrange (Garrigou-Lagrange, 1934, p. 557-558). Garrigou-Lagrange believed that all of God's knowledge must be self-determined in order for God to remain *a se* (Craig, 1991, p. 270). An attempt to undercut this objection was then presented in the form of a logical limitation with respect to God's omnipotence affirmed to exist by Thomas Flint and Alfred Freddoso (Flint & Freddoso, 1983, p. 93-98).

Molinism certainly does deny some aspects of Thomism, though this seems to be logically determined by the Molinist's affirmation of libertarian free will (Craig, 1991, p. 270-274). Due to this limitation being a logical one, it seems likely that an all-encompassing solution to this problem does not exist.

Campbell's objection that middle knowledge detracts from God's self-existence remains untouched and it is to this that we will now turn our attention. The Molinist affirms that God's middle knowledge exists prevolitionally and as sets of propositions[24]. As such, in order to better address this problem, more must

[24] If it is the case that the free creatures God creates begin to exist only after the divine decree – or perhaps at the time of the divine decree, if one affirms a B-Theory of time – then it seems to be the case that the creatures themselves could not cause God's middle

be said about propositions, possible worlds and abstract objects.

knowledge. Thus, God's middle knowledge must take the form of a proposition.

Chapter 4

Abstract Objects: Realism and the Singular Term Argument

4.1 Introduction

Campbell's objection to Molinism is that by giving God middle knowledge, the Molinist creates a scenario where God must rely on external sources in order to have complete knowledge (Campbell, 2006, p. 16-19). That is to say, God's middle knowledge is completed by drawing on external sources. Middle knowledge manifests itself as subjunctive conditionals which exist as propositional statements occuring prior to God's decree and are collated and combined with God's natural knowledge so as to maximally describe possible worlds (Perszyk, 2013, p. 755-756).

Possible worlds and propositions are taken to exist as abstract objects, and as such in this chapter the concept of an abstract object will be explored (Craig, 2012, p. 441). Once defined, some number of the realist views of abstract objects will be explored with the intention being to show which views are open to the Molinist and which views are closed to the Molinist.

4.2 Abstract Objects

What can be said of abstract objects? Paul Gould explains that terms and predicates such as properties, propositions, relations, sets, numbers and pos-

sible worlds would fall into the class of objects called abstract objects (Gould, 2011a, p.255-256). William Lane Craig concurs with this view when he says:

> Metaphysicians take the distinction between concrete and abstract to be exclusive and exhaustive and typically provide paradigm examples of each kind of object: if such things exist at all, people, electrons, mermaids, and planets would be concrete objects, whereas mathematical objects (like numbers, sets, and functions), properties, and propositions would be abstract objects (Craig, 2012, p. 441).

On the view Craig articulates, abstract objects can't be concrete objects and vice versa. David Bell affirms that abstract objects include things like numbers, sets and propositions but goes on to say that abstract objects are "non-spacial, atemporal, non-causal and, hence, imperceptible" (Bell & Hart, 1979, p. 135).

The view that abstract objects exist outside of space-time and without causal relations is one which has been affirmed by a number of philosophers including Gottlob Frege (Frege, 1960, 1956), Bertrand Russell (Russell, 1912), Kurt Godel (Godel, 1947) and Willard Quine (Quine, 1948). More recently, this view of abstract objects has been considered and approved by a number of philosophers of mathematics including Hilary Putnam (Putnam, 1971), Stewart Shapiro (Shapiro, 1997) and Mark Colyvan (Colyvan, 2001).

Craig points out that because concrete objects are things which exist spacio-temporally, it is often thought that any object which doesn't exist spacio-temporally must then be an abstract object (Craig, 2012, p. 441-442). The classical theist, and indeed the Molinist, would object to this view on the grounds that this rule of thumb is deficient if it is true that God exists. On the classical theistic view, God is considered to be a personal entity who, at least at some point, existed apart from space-time, yet created our universe and continues to causally interact with space-time as concrete objects typically would. Thus, Craig suggests, one defining difference between concrete and abstract objects is that the latter are "virtually universally agreed" to be causally impotent (Craig, 2012, p. 441-442).

By saying abstract objects are causally impotent, we mean to say that abstract objects don't stand in cause-effect relationships[1] (Craig, 2012, p. 441-442). Something like a number, for example, could never cause anything to happen. Craig goes further in saying:

> Numbers, for example, do not cause anything. More than that, their causal impotence seems to be an essential feature of abstract objects. The number seven, for example, does not just happen to lack all causal effects; there is no possible world in which seven could effect something. (Craig, 2012, p. 441-442).

Craig argues that causal impotence separates abstract objects from other objects which are causally isolated from the world but might have otherwise been causally related to the world. The theist, for example, may view God as having the potential to enter into causal relations with the world while affording God the freedom to choose not to enter into causal relations with the world. By having the potential to relate causally, God is not causally impotent and thus could not be considered to be an abstract object even if God had chosen not to causally relate to the world after it had been created (Craig, 2012, p. 442).

Defining objects as being abstract or concrete by means of negation was first promulgated by Frege and further expounded upon by David Lewis (Lewis, 1986). The method of distinction between abstract and concrete objects which Craig subscribes to is widely accepted and named the Causal Inefficacy Criterion by Gideon Rosen[2] (Rosen, 2014).

As has been illustrated, this work takes possible worlds to exist as maximally descriptive propositional statements which outline reality in some sense[3]

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[1] Alvin Plantinga holds that as mental objects, abstract objects could stand in causal relations in the same way that thought and thinker can stand in causal relations. That is to say, a thinker causes a thought to come into being which constitutes a causal relation (Plantinga, 2011, p. 288).

[2] The second method of distinction is to affirm that abstract objects exist as both causally impotent and non-spatially. This is called the Non-Spatiality Criterion (Rosen, 2014).

[3] See the section called *Possible Worlds* in Chapter 3 of this work.

(Plantinga, 1974a, p. 34-35). This view, then, puts possible worlds into the class of abstract objects. This view of possible worlds as abstract objects is held by Alvin Plantinga and shared by a number of philosophers including Robert Adams (Adams, 1974), Roderick Chrisholm (Chrisholm, 1976) and John Pollock (Pollock, 1984).

It stands to reason, then, that in order to best respond to the objection raised by Travis Campbell, the Molinist must formulate a view of abstract objects. Of course, the conundrum of the relationship between abstract objects and God is nothing new (Gould, 2011b, p. 255) and a great deal of what is applicable to the theist will be applicable to the Molinist. Having said that, the constraints provided by middle knowledge mean a slightly different perspective is required.

Craig argues that there are broadly three approaches to abstract objects: that they exist — the realist approach — that they do not exist — the anti-realist approach — and that there is no fact on the matter as to whether abstract objects exist or not — the arealist approach (Craig, 2016, p. 202-207).

It should be noted that the anti-realist position is often called nominalism. Craig intentionally avoided the name nominalism, considering it to be a potential stumbling block for those trying to understand his position (Craig, 2016, p. 202-207). Gonzalo Rodriguez-Pereyra reports that the term nominalism could refer to the rejection of abstract objects or the rejection of universals[4]. While both the rejection of abstract objects and the rejection of universals argue based on similar grounds, each can be held independently of the other (Rodriguez-Pereyra, 2015). It is this confusion that Craig wishes to avoid.

Each of these three views of abstract objects is mutually exclusive — by selecting one, the others are precluded. The remainder of this work will endeavour to review some number of these options and show which are available to the

[4] Universals can be said to be things which can be instantiated. That is to say, if redness is a universal, then every object which is red can be considered to be an instance of the universal red. Properties, relations and kinds are considered to be universals. Where abstract objects are typically considered to include universals, as well as other things such as propositions or numbers, universals are not considered to include abstract objects, such as numbers (Rodriguez-Pereyra, 2015).

Molinist based on philosophical and theological[5] motives. The first view examined will be the platonist view.

4.3 Platonism

The view that uncreated, mind-independent, abstract objects exist is called platonism (Craig, 2016, p. 201). Just as above, the platonist views abstract objects as being causally impotent. Additionally, the platonist asserts that abstract objects are non-spacial, non-temporal and unchanging (Balaguer, 2016). The platonist would distinguish between abstract and concrete objects by making use of the Non-Satiality Criterion rather than the Causal Inefficacy Criterion (Rosen, 2014).

In asserting that abstract objects exist mind-independent, the platonist is saying that abstract objects exist in the external world as entities (Craig, 2012, p. 442-443). They are not minds, they do not exist in minds as ideas, nor are they physical in any way. Yet, on the platonist view these abstract objects exist in the external world in a *real* way, similarly to the way concrete objects exist Balaguer (2016).

Platonism can be divided into two categories: lightweight platonism and heavyweight platonism. Heavyweight platonism is the view that abstract objects really exist apart from minds, as has been outlined above. The heavyweight platonist would assign the same level of existence to a number as they would to Maurice or his board game, for example (Craig, 2016, p. 201).

Øystein Linnebo explains that lightweight platonism, on the other hand, exists somewhere between "full fledged platonism" and anti-realism[6] (Linnebo, 2013). Lightweight platonism claims that abstract objects are not objects in the typical sense, but rather that they are "the referents of certain abstract singular terms" (Craig, 2012, p. 442).

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[5] By *theological* motivation, I mean motivation based on theological concerns - that is, concerns found in Scripture or Christian tradition.

[6] Anti-realism will be discussed in further detail in chapter 5.

That is to say, in the event that a term w contributes to the truth value of a sentence in which it occurs, that term contributes to the semantic value of the sentence. In doing this, w refers to an abstract singular term (Linnebo, 2013).

For example, consider the true sentence "there is a hole in my shirt." The lightweight platonist would affirm that a hole in my shirt is an object because in a true sentence like "There is a hole in my shirt", the hole in my shirt is a referent of the term "hole in my shirt". The lightweight platonist sees these objects as semantic referents — that which we speak about when we use abstract terms. These terms, like "the hole in my shirt", need not exist in order for us to meaningfully speak of their existence[7] (Craig, 2016, p. 201-202).

Bob Hale states as much when he says:

> If it is taken as invoking the everyday notion of object, the question whether there are abstract objects is devoid of philosophical interests; its answer is quite certainly that there are not, but that is trivial — a great many kinds of thing beside those whose title to be recognised as abstract objects has been taken seriously by philosophers fail to count as objects in that sense (Hale, 1987, p. 26).

Hale agrees that abstract objects are not objects in the ordinary sense of the word, and as such do not exist.

John Burgess characterises the lightweight platonist view when considering ontological metaphysics by converting the question of whether numbers exist from an ontological question into a theological question:

> Did it or did it not happen, on one of the days of creation, that God said, 'Let there be numbers!' and there were numbers, and God saw the numbers, that they were good? (Burgess, 2004, p. 30-31).

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[7] The example chosen here is no accident. Discourse surrounding non-existent objects is notoriously challenging, with singular terms making reference to non-existent objects not an option on classical logic. Thus, to speak about "the hole in my shirt" on classical logic is not possible. This will be discussed in further detail in chapter 5.

Burgess goes on to say:

> If as I believe the theological question does make sense, and as I suspect it is the only sensible question about the italics-added real or capital-R Real existence of numbers, then I would answer that question in the negative; but then I would equally answer in the negative the question of the Real existence of just about anything (Burgess, 2004, p. 30-31).

Burgess, then, believes that very few things truly exist in the metaphysically heavy sense, including abstract objects. Burgess' lightweight platonistic view of abstract objects, like that of Hale's, is more similar to the view characterised by conceptualism or anti-realism[8] (Craig, 2012, p. 442).

Lightweight platonism poses no threat to the Molinist because, on this view, possible worlds and other abstract objects do not exist. They do not exist apart from God to undercut God's aseity in any way[9] - they simply do not exist. Heavyweight platonism, however, poses a serious threat to the Molinist. The heavyweight platonist would affirm that infinite abstract objects actually exist uncreated and alongside God eternally (Craig, 2016, p. 201). The heavyweight platonist would affirm that the propositions and possible worlds contained in God's middle knowledge actually exist apart from God, who would then be dependent upon something which exist apart from God for middle knowledge to be complete[10].

On the heavyweight platonist view, Travis Campbell's objection provides a serious problem for the Molinist, successfully undercutting God's aseity[11] (Camp-

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[8] Conceptualism will be discussed in this chapter while anti-realism will be discussed in Chapter 5.

[9] Thus, on a lightweight platonist view, abstract objects are not required to exist apart from God. Therefore, God's middle knowledge can exist while simultaneously asserting that God is wholly self-existent.

[10] Thereby making God something less than wholly self-existent.

[11] Campbell's objection explored in greater detail in the section called Campbell's Objection, in chapter 3.

bell, 2006, p. 16-19). What motivation exists to adhere to heavyweight platonism?

4.4 The Indispensability Argument

Heavyweight platonism, henceforth referred to simply as platonism, promulgates the view that we are committed to the existence of abstract objects by many of the statements we believe to be true (Balaguer, 2016). These true statements could be, for example, mathematical statements like "$1 + 1 = 2$" or descriptive statements like "Fido is a dog" and so on (Craig, 2012, p. 442-443). On platonism, in asserting that "Fido is a dog" is true, we are committed to believing that Fido, the dog, actually exists.

Platonists claim that in order to preserve theories found in natural sciences, abstract objects commonly found in mathematics, such as numbers, must exist. Craig expresses this when characterising the platonist claim in saying:

> Reference to and quantification over abstract objects, particularly mathematical objects, is simply indispensable to natural sciences, and therefore the truth of those theories requires that the abstract objects referred to and quantified over exist (Craig, 2012, p. 442).

This view of abstract objects existing essentially is one which has been affirmed by a number of philosophers such as Willard Quine (Quine, 1948), Hilary Putnam (Putnam, 1971) and Mark Colyvan (Colyvan, 2001).

The argument that singular terms are indispensable is referred to by Craig as the Indispensability Argument (Craig, 2016, p. 210) and by Mark Balaguer, the philosopher of mathematics, as the Singular Term Argument (Balaguer, 2016). Balaguer expresses the general form of this argument as follows:

(1) If a simple sentence (i.e., a sentence of the form "a is F", or "a is R-related to b", or. . .) is literally true, then the objects that its singular terms denote exist. (Likewise, if an existential sentence is literally true, then there exist objects of the relevant kinds; e.g., if "There is an F" is true, then there exist some Fs.)

(2) There are literally true simple sentences containing singular terms that refer to things that could only be abstract objects. (Likewise, there are literally true existential statements whose existential quantifiers range over things that could only be abstract objects.) Therefore,

(3) Abstract objects exist (Balaguer, 2016).

A number of things should be noted about this argument.

The first premise of the argument states a criterion of ontological commitment (Balaguer, 2016). This means that from any sentence, we can tell what must exist in order for that sentence to be true. Balaguer defines a criterion of ontological commitment as such:

> A criterion of ontological commitment is a principle that tells us when we are committed to believing in objects of a certain kind in virtue of having assented to certain sentences (Balaguer, 2016).

The criterion of ontological commitment shows us what we are committed to believing exists.

The first segment of premise one of the argument stipulates that we are ontologically committed by singular terms. Balaguer defines a singular term as a denoting phrase which refers to a specific object (Balaguer, 2016). Singular terms would include such things as proper nouns, definite descriptions like "the oldest South African" and demonstrative expressions like "this board game" (Craig, 2012, p. 442).

Balaguer distills this by saying:

> If you think that a sentence of the form "a is F" is true, then you have to accept the existence of the object a, but you do not have to accept the existence of a property of Fness (Balaguer, 2016).

That is to say, if we believe a simple sentence such as "Fido is a dog" is literally true, we must believe the object denoted by the singular term "Fido" literally exists. However, based on the first premise, we are not committed to the existence of the property dogness or doghood (Balaguer, 2016).

Another thing to note is that the first premise stipulates that the sentence in question must be considered to be literally true. Sentences containing metaphors may be true but ontological commitment does not follow from these sentences. For example, a person saying "it is raining cats and dogs" could be communicating truth, namely that it is raining heavily, but this person would not be committed to cats or dogs falling from the sky. Thus, singular terms in non-literal speech cannot be considered to be ontologically committing (Balaguer, 2016).

The second segment of premise one claims that we are ontologically committed by existential statements in the same way that we are ontologically committed to singular terms. That is to say, sentences with existential quantifiers are similarly ontologically committing. Existentially quantified statements are statements which are true of some of the members of a domain of quantification. For example, if the domain of our quantification is dogs, the sentence "some dogs are called Fido" is true if at least one member of the domain of our quantification is called Fido (Balaguer, 2016).

In first order logic, these existentially quantified statements can be expressed as:

$$(\exists x)Fx \text{ (Balaguer, 2016)}$$

So that we could express the sentence "some dogs are called Fido" in first order logic as:

$$(\exists x)(x \text{ is a dog } \& \text{ x is called Fido}) \text{ (Balaguer, 2016)}$$

We can read the above as "There exists an x such that x is a dog and x is called Fido." Thus, in order for the sentence "some dogs are called Fido" to be true, at least one dog must be called Fido.

Existentially quantified statements are just as ontologically committing as simple sentences with singular terms. On the platonist view, the person making these kinds of statements is committed in the heavyweight sense to the existence of the abstract objects referred (Balaguer, 2016). For example, when

a platonist says "some triangles are equilateral" that person is ontologically committed to the existence of triangles, some of which are equilateral.

The first premise of the Singular Term argument expresses a meta-ontological claim regarding how a person commits themselves ontologically (Bricker, 2014). The first premise stipulates that singular terms and existential quantification are devices of ontological commitment[12] (Balaguer, 2016).

The second premise claims that the singular terms in literally true simple sentences must refer to abstract objects. That is to say, they cannot refer to concrete objects, figurative objects or anything of that nature. The objects referred to must be abstract, and as such, we are committed to abstract objects which literally exist in the external world on the platonist view. The same can be said for literally true existentially quantified statements which quantify over abstract objects[13].

Thus, statements like "2 + 2 = 4" or "there are prime numbers greater than 100" must be thought of as literally true and literally referring to existent, abstract objects in the same way that "Fido is a dog" would refer to a literal dog[14].

From the first two premises, the conclusion (3) follows.

It would seem that if the Molinist is to preserve God's aseity by defeating Campbell's argument, the Platonist's Singular Term argument must be either circumnavigated or successfully objected to in some way. Alternatively, one could show that abstract objects existing apart from God do not undermine God's aseity in some way — the view we will encounter first.

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[12] That is to say, on the platonist view by reading these sentences as being literally true, one can say that the singular terms referred to must be grounded in reality.

[13] Thus, on the platonist view one cannot quantify over objects objects which cannot be or are not to be grounded in reality.

[14] For the platonist, then, to speak of Fido the dog as existing carries the same level of ontological commitment as making true mathematical statements like "2 + 2 = 4", for example. For the platonist, the singular term "4" exits in the same way that Fido, a real dog, would.

4.5 Uncreatable Abstract Objects

Peter van Inwagen is a theist who holds to platonism, claiming that the platonist's Singular Term argument is correct (van Inwagen, 2015b, p. 289). Van Inwagen attempted to get around the problem of God's aseity and platonism by making two arguments. First, that not all of reality apart from God needs to have been created by God (van Inwagen, 2009, p. 4-7), and second, that it is unreasonable to consider abstract objects as things which could be created (van Inwagen, 2009, p. 7-11).

Van Inwagen initially claimed that his view did not contradict the Nicene Creed because built into the Nicene Creed is a limitation that God could only create things which could be created (van Inwagen, 2009, p. 3-5).

The passage of the Nicene Creed which van Inwagen has in mind is[15]:

> I believe in one God, the Father, Almighty, Maker of heaven and earth and of all things visible and invisibe;
>
> And in one Lord, Jesus Christ, the only begotten Son of God, begotten of the Father before all worlds, God of God, Light of Light, very God of very God, begotten, not made, being of one substance with the Father; by whom all things were made (Grudem, 2000, p. 1169).

Thus, van Inwagen believes that when we say that God has created everything, we are speaking of only things which can be created. As a result, if we think abstract objects are things which can't be created, we cannot be referring to them when we say that God created everything[16] (van Inwagen, 2009, p. 3). Van Inwagen contends that this view is similar to the view which affirms that God's inability to make square circles or married bachelors does nothing to detract from God being maximally powerful (van Inwagen, 2009, p. 3).

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[15] Once again, I have quoted a segment of the Nicene Creed as revised at Constantinople in A.D. 381.

[16] Van Inwagen contends that when we say God created all things, we can be speaking of all things which can be created. Things which cannot be created would include necessary things such as abstract objects or God.

Van Inwagen's view can be summarised as such[17]: If one is happy to affirm that it is not logically possible for God to create a square circle, then one should be happy to say that God did not create abstract objects because abstract objects are uncreatable – they cannot be created.

Van Inwagen has since backtracked on this view and agrees with Craig that no such limitation exists in the Nicene Creed (van Inwagen, 2015a, p. 300-302), even going as far as to explicitly stating as much:

> I think Craig is very likely right when he tells his readers that when the fathers made statements like "God is the creator of all things" (always excepting himself-and I leave questions about the ontology of evil out of the discussion), they meant their use of the universal quantifier to be absolutely unrestricted (van Inwagen, 2015a, p. 302).

Here, van Inwagen affirms that the Nicene Creed carried no internal limitation such that when it is claimed that God is the creator of all things, no thing apart from God can be thought of as existing outside of this range.

For the Molinist, van Inwagen's view is particularly problematic. Leaving aside problems regarding creation[18], van Inwagen's view still sees abstract objects as existing uncreated and alongside God in a very real sense – exactly the problem which Travis Campbell has pointed out and the objection which the Molinist should attempt to avoid.

As such the Molinist, tasked with preserving God's aseity as classically understood, could end their investigation here with van Inwagen's view eliminated as a possibility. Nevertheless, it would be somewhat remiss not to consider

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[17] It should be reiterated that van Inwagen's fundamental assumption is that the Singular Term argument is correct. This argument will be further addressed in Chapter 5.

[18] The Molinist has previously been shown to concur with the classical theist that God can be seen as being Creator, where this is typically considered to be taken that God is the cause of all reality *extra se*. In recent years, William Lane Craig has engaged in further research in this field in an attempt to show that this is the case (Craig, 2016, p. 202-205).

van Inwagen's philosophical reasoning for holding that abstract objects are uncreatable.

Van Inwagen argues that creation is a causal relation. But given abstract objects cannot enter into causal relations, abstract objects cannot have been created. Therefore, if abstract objects exist, they exist uncreated[19] (van Inwagen, 2009, p. 5).

Van Inwagen's second premise, that abstract objects cannot enter into causal relations, is not universally accepted. Stipulating that they be considered as thoughts in the divine mind, Plantinga suggests that propositions could enter into causal relations in the same way that a thought and a thinker interact:

> these objects can enter into the sort of causal relations that holds between a thought and a thinker, and we can enter into causal relation with them by virtue of our causal relation to God. It is therefore quite possible to think of abstract objects capable of standing in causal relation (Plantinga, 1996, p. 121).

Nevertheless, to appeal to the view that abstract objects can stand in causal relations does seem to be a case of moving the goalposts. Abstract objects being defined as causally impotent by means of the Causal Inefficacy Criterion is a big part of how they are set apart from concrete objects, so to now decide that abstract objects can stand in causal relations when an inconvenient argument has been raised seems inconsistent.

A satisfactory solution to the philosophical component of van Inwagen's claim is highly complicated and not without objection. For example, Paul Gould

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[19] In saying this, van Inwagen is forced to say that all abstract objects which exist, exist uncreated and thus necessarily. Van Inwagen does, in fact, admit that this is his view (van Inwagen, 2009, p. 6-7). This should not be construed to mean that all abstract objects exist as necessarily true, just that their existence is necessary. As van Inwagen points out, in order for this to be true a controversial thesis of modal metaphysics called Serious Actualism must be thought of as true (van Inwagen, 2009, p. 7). On Serious Actualism, all properties and relations are necessarily existence entailing (Menzel, 2016). Readers further interested in Serious Actualism are referred to work by Alvin Plantinga (Plantinga, 1983), Kit Fine (Fine, 1985) and Christopher Menzel (Menzel, 1991).

claims that God can create free abstract objects[20]. Gould affirms that van Inwagen has not adequately defended his view that God cannot create abstract objects, doing so by appealing to the work done by John Carroll (Carroll, 2009) and James Woodward (Woodward, 1990) on anti-reductionism in relation to causation (Gould, 2014).

Gould concurs with van Inwagen by contending that abstract objects exist necessarily, but differs by stipulating that an object existing necessarily does not mean that the object in question existed at all times. That is to say, Gould holds that necessary objects can exist as created – Gould's view is that necessary abstract objects can begin to exist (Gould, 2014, p. 103).

To do this, Gould promulgates two concepts of necessity: *scope necessity* and *nature necessity*. Scope necessity says "if x exists necessarily, then x exists in every possible world" (Gould, 2014, p. 104). Nature necessity says "if x exists necessarily, then the cause or reason for x's existence is included in its own nature; that is, x has no external cause for its existence" (Gould, 2014, p. 104). Gould founds this view on the idea that modal facts are distinct from essential facts[21] (Gould, 2014, p. 104).

Part of how Gould argues this is by making the point that any entity which were to be created by God in all possible worlds would also need to be thought of as existing necessarily[22]. Thus, Gould claims that a necessary entity does not need to exist uncreated, and could be thought of as being both necessary and created (Gould, 2014, p. 106).

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[20] Where a free abstract object is one which can be thought of as existing apart from any connection to or dependence on a contingent object or entity (van Inwagen, 2009, p. 7).

[21] Gould achieves this distinction by appealing to the work of Kit Fine (Fine, 1994) who affirms that modal facts are distinct from essential facts. For example, on this view, one could agree that one person has one body and one mind while disagreeing regarding the essential properties of persons by saying that perhaps persons are really just minds which happen to have bodies (Gould, 2014, p. 104). Interested readers are referred to work by Hugh McCann (McCann, 2012), who also argues that essential existence does not necessitate necessary existence.

[22] For example, suppose God were to create an entity x in every world such that x is not God, x would have to be considered as a necessary entity. x would then have scope necessity but not natural necessity (Gould, 2014, p. 106).

Simultaneously, if all entities which exist as created in possible worlds which are distinct from God depend on God, then it would be true to say that these entities would exist dependent upon God[23] (Gould, 2014, p. 106).

Gould claims that it is necessarily true for God as a necessary being to create all necessary objects[24] (Gould, 2014, p. 107). That is to say, it is necessarily true that God will create all necessary objects. In saying this, Gould endows God with the essential property of creating necessary objects or entities (Gould, 2014, p. 107-108).

Gould argues that the causal relationship between God and necessarily existent abstract objects[25] runs only in one direction, claiming that the anti-reductionism work regarding causation done by Carroll (2009) and Woodward (1990) provides a credible line of reasoning regarding how it could be that only one side of the *necessary being – necessarily existent abstract object* equation can be causally responsible while the other side of the equation remains causally impotent (Gould, 2014, p. 108-110).

Gould's view opens itself up to the bootstrapping criticism[26] by saying that God causes necessarily existent abstract objects to exist whilst already possessing the necessarily existent property of being able to create all necessarily existent objects – a circular argument. Gould has responded to this objection by arguing that it is possible for God to possess properties which are necessary by affirming that they exist *a se*[27] (Gould, 2011b, p. 56-57). How one would come to develop a criterion for deciding which properties exist *a se* and which do not remains ground for further investigation.

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[23] In the case of the created entity x where x is not God, x would then be an entity which is created, dependent on God and an entity which possesses scope necessity.

[24] Here, Gould appeals to the work of Brian Leftow (Leftow, 1989), who affirms that if God exists necessarily, and an object exists necessarily, then it is true that there can be no world in which God fails to cause the existence of necessary objects (Leftow, 1989, p. 144).

[25] Such as properties.

[26] The bootstrapping argument will be considered again in the following section.

[27] That is to say, Gould claims it would be possible for God's necessary properties to exist as a part of God and *a se*, and that all other necessary abstract objects, along with all other reality, would exist as created by God.

While Gould's view remains one which is interesting whilst requiring further investigation[28], his objection to van Inwagen's platonic theism does nothing to make the view that uncreated abstract objects exist alongside God any more viable for the Molinist. On van Inwagen's view, abstract objects exist uncreated and alongside God, thereby creating a scenario where God does need to rely on external propositions which exist apart from God, all of which would seem to make God something other than wholly self-existent.

4.6 Absolute Creationism

Absolute creationism is a view promulgated by Thomas Morris and Christopher Menzel which holds that abstract objects exist, that these abstract objects depend on God to exist and that these abstract objects exist in the mind of God (Morris & Menzel, 1986, p. 354).

Some amount of controversy exists around absolute creationism, with Craig asserting that it is often conflated with divine conceptualism[29]. Craig takes absolute creationism to be the view that abstract objects exist apart from God while still being causally dependent upon God (Craig, 2016, p. 206-207).

In considering absolute creationism, Paul Gould holds a slightly different view and affirms that absolute creationism:

> locates the platonic horde within the mind of God as created, and thus dependent, entities. Properties and relations are identified with divine concepts, and the rest is built up from there. Propositions are just divine thoughts. Numbers, sets, and possible worlds are also explicated in terms of properties and relations (that is, divine concepts) and propositions (that is, divine thoughts). Importantly, God creates all reality distinct from God, including the entire Platonic horde (Gould, 2011a, p. 265).

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[28] Gould's view also appears to be very similar to absolute creationism, which will be discussed next.

[29] Divine conceptualism is the view that abstract objects exist in the mind of God (Craig, 2016, p. 209).

Craig and Gould agree that Morris and Menzel promulgate the view that abstract objects exist as entities which began to exist and were created by God, but differ on whether these entities exist in the mind of God or not. This confusion is noted by both Craig (2016:206-207) and Gould (2011a:265-266) and is to be expected when examining Morris and Menzel's work on the matter. Consider the following excerpt:

> [Morris and Menzel] suggest, to begin with, that all properties and relations are God's concepts, the products, or perhaps better, the contents of a divine intellective activity, a causally efficacious or productive sort of divine conceiving (Morris & Menzel, 1986, p. 355).

Here, Morris and Menzel assert that properties and other abstract objects are a product of God's thought – their view as portrayed by Gould.

However, in summarising their view, Morris and Menzel say:

> We have here a view which both retains the commitments of realism concerning the objective existence and status of abstract entities and modal truths, while at the same time capturing the conviction of anti-realists and conventionalists that such items must be in some sense mind-dependent (Morris & Menzel, 1986, p. 361).

Here, Morris and Menzel affirm that the abstract objects created by God exist objectively in such a way as to concur with the realist, or platonist, view – their view as portrayed by Craig.

Paul Copan and William Lane Craig register their confusion on this topic when they say:

> Morris and Menzel present their view as an updated version of the Augustinian theory of divine ideas and, hence, as a version of what we (below) call conceptualism. Nevertheless, although that is their intention, they continue to speak of the products of God's intellectual activity as abstract entities, which suggests the interpretation

> that abstract objects are created things external to God and caused by divine intellectual activity (Copan & Craig, 2004, p. 174-175).

Whether this objection is justified or not, what is certainly true is that both Craig and Gould agree that Morris and Menzel's view sees abstract objects as having been created and that they exist. Despite their difference in opinion with respect to whether the absolute creationist locates the platonic horde in God's mind or not, both Craig and Gould share the same objection to absolute creationism as promulgated by Morris and Menzel.

Craig and Gould both agree that absolute creationism suffers from what is called the bootstrapping problem (Craig, 2016, p. 6-8). This objection can be formulated as such: Morris and Menzel affirm that all properties are created by God (Morris & Menzel, 1986, p. 355), but in order for God to be able to create a property, God would already have to possess properties required for the creation of properties – a circular argument (Craig, 2016, p. 206-208).

Craig points this out when he says:

> In order to create properties, God must already possess properties. For example, in order to create the property of being powerful God must already possess the property of being powerful, which involves a vicious circularity (Craig, 2016, p. 206-207).

Paul Gould expresses the same objection, even going as far as to say that he considers the problem to be fatal for the absolute creationist (Gould, 2011a, p. 268-269).

In postulating a potential solution for the absolute creationist, Craig suggests that one could affirm that God has the ability to create a property without having the property of being able to create properties (Craig, 2016, p. 206-207). In doing this, however, the absolute creationist would be pushed towards embracing anti-realism where "talk of properties is just a convenient *façon de parler*" because no motivation for realism would remain[30] (Craig, 2016, p. 206-

[30] Where speaking about abstract objects without committing to their existence could be seen as being similar to lightweight platonism.

207).

Gould provides a similar solution by saying that one could simply affirm that only properties apart from those which God embodies would be created by God. The properties which are essential to God's being would then exist *a se* within the divine mind as uncreated, "brute facts" (Gould, 2011a, p. 268).

Both Craig (Copan & Craig, 2004) and Gould (Gould, 2011b) have argued their positions further respectively.

While it is possible that one or both of these solutions would be open to the theist, a further problem exists for the Molinist. Molinism claims that God's act of creating occurs between God's middle knowledge and God's free knowledge, such that God's free choice to create is informed both by natural knowledge and middle knowledge. If God's middle knowledge is made up of abstract objects such as possible worlds and propositions, and God's middle knowledge exists prior to the free act of creating (Flint, 1998, p. 43), it is logically incoherent to think of God as having created abstract objects. That is not to say that absolute creationism is an impossible position for the Molinist, though adhering to the position would require further refinement[31].

4.7 Divine Conceptualism

Conceptualism, sometimes referred to as psychologism, is the view that abstract objects exist as thoughts or concepts in minds which are called mental objects (Balaguer, 2014, p. 6). This view can not be considered to be a platonist view, because platonism stipulates that abstract objects are to be considered mind-independent (Balaguer, 2014, p. 3), thus psychologism, or conceptualism, falls into the category of anti-platonic realism (Craig, 2016, p. 208).

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[31] One could affirm that creation of abstract objects could exist prior to the creation of our universe, though understanding creation in this way would not be congruent with seeing the divine decree as being both the full act of creation while also being informed by God's middle knowledge, as is the way the divine decree is seen by the Molinist (Plantinga, 1974b, p. 173-181). For more on the divine decree, see the section called *God's Knowledge* in Chapter 2 of this work.

On psychologism, objects falling into the class of abstract objects are considered to be mental objects which actually exist in a mind (Balaguer, 2014, p. 6), and sentences about these objects are simply descriptions about those ideas. For example, the sentence "3 is a prime number" would simply describe an idea which exists in a mind (Balaguer, 2016). Thus, on psychologism to speak of the number 3, for example, the number would need to exist in a mind as a mental object.

Viewing abstract objects in this manner has been around for a very long time, with Frege (Frege, 1960) providing particularly strong criticism of considering mathematical objects in this way during the 19th century (Balaguer, 2014, p. 6).

One of Frege's arguments was that there simply aren't enough objects in human minds to sustain the number of objects referred to in mathematics (Balaguer, 2016). For example, in mathematics certain set theories postulate actual infinites, but there is no reason to believe that infinites could exist in the minds of finite humans (Balaguer, 2014, p. 6) This argument, along with a number of other arguments, "essentially buried" psychologism (Balaguer, 2016).

Frege's objection is certainly true when speaking of finite human minds, but as Craig points out, does not hold when applied to an infinite, divine mind[32]. Thus, divine conceptualism views abstract objects as being entities of God's mind — they are in some way God's thoughts which we can analyse (Craig, 2016, p. 208-209).

Greg Welty (Welty, 2006) is a recent proponent of divine conceptualism who holds that abstract objects such as properties, propositions, possible worlds and mathematical objects would not exist until conceived of by God, thereby making them dependent upon God (Craig, 2016, p. 209). Furthermore, on Welty's view these abstract objects exist purely conceptually and within the mind of God (Gould, 2011a, p. 269-270).

On conceptualism, a propositional statement like "3 is a prime number" simply describes an idea in a mind (Balaguer, 2016). Similarly on Welty's divine

[32]For example, there is no reason to believe that an infinite, divine mind could not think of an infinite number of things at any given time.

conceptualist view, propositions are taken to be the semantic content of a sentence[33] and as such, a proposition is simply a description of the truth found in God's mind (Welty, 2004, p. 55-56). Similarly, Welty views universals as a means to explain attributes across multiple objects[34] (Welty, 2004, p. 56-57).

Craig points out that in affirming these abstract objects exist in a non-real way as dependent entities, but within God, the nerve between divine conceptualism and realism appears to have been severed[35] (Craig, 2016, p. 209).

Divine conceptualism affirms that abstract objects need to exist in God's mind in order for external agents to refer to them. Thus for any proposition, irrespective of whether that proposition is true or not, the thought that proposition corresponds to would have to be actively located in God's consciousness at all times (Craig, 2016, p. 209). The same would be true for other abstract objects like properties, numbers, sets and so on.

One of the problems with this view is that there is no reason to believe that God would in fact be consciously considering every proposition at all times. That is to say, even if God does know all true things at any given time, it does not follow that God entertains all of these thoughts in consciousness at all times. Craig demonstrates this by saying:

> But conceptualists move far too hastily from the fact that God is omniscient to the view that all that God knows is occurrent in consciousness. God's infinite knowledge is clearly not sufficient to guarantee that there are the actual mental events needed by the conceptualist (Craig, 2016, p. 209).

Craig considers the fact that God would be required to hold inane propositional truths such as "for any real number r, r is distinct from the Taj Mahal"

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[33] Propositions were further discussed in the section *Possible Worlds* in Chapter 3 of this work.

[34] For example, both a ball and a house having the attribute of being red.

[35] Gould holds a similar view, saying that on Welty's view "abstract objects do not exist realistically for God" (Gould, 2011a, p. 270).

in consciousness at all times to be unlikely given the triviality of these statements[36] (Craig, 2016, p. 209).

A worse problem would be considering God to hold false propositional statements in conscious thought at all times. Consider, for example, "for any real number r, r is identical to the Taj Mahal" – a necessarily false propositional statement. Craig points out that there is little reason to believe God would hold this proposition in conscious thought constantly, yet this is what divine conceptualism requires. However, this is still a possibility, as Craig notes:

> Obviously, the concern is not that God would be incapable of keeping such a non-denumerable infinity of thoughts ever in consciousness, but rather why He would dwell on such trivialities (Craig, 2016, p. 209).

For the Molinist, however, this represents a deeper problem. Molinism defines God's knowledge as existing as natural knowledge, middle knowledge and free knowledge. Through God's natural knowledge, God knows what is necessarily true. Through God's middle knowledge, God knows contingent truths which exist beyond God's control. Through God's free knowledge, God has perfect knowledge all contingent truths which are under God's control (Flint, 1998, p. 43).

The Molinist makes truth claims about God's knowledge, stating that God's knowledge is made up of true things[37]. On the Molinist view, God's knowledge provides no space for necessarily false proposition like "for any bachelor b, b is married" or "$1 + 2 = 12$" or any other proposition which can be considered

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[36] That is not to say that God could not do this, just that Craig believes it is rather strange to think this would be the case.

[37] Consider for example God's knowledge with respect to counterfactuals of creaturely freedom. The Molinist holds that God knows all true counterfactuals of creaturely freedom, not that God knows the truth value of all counterfactuals of creaturely freedom. Were the latter to be true, God would know if a counterfactual of creaturely freedom, in propositional form, possessed the property of being true or not. On the former, God's knowledge is limited to only true counterfactuals of creaturely freedom (Flint, 1998, p. 41-43).

to be necessarily false. How, then, would God come to know the necessarily false propositions in order for external agents to refer to them?

Nevertheless, divine conceptualism is not entirely ruled out for the Molinist. God could hold necessarily false ideas in conscious thought, while knowing those ideas are false, for the explicit purpose of allowing external agents to refer to them. The Molinist could affirm that God could come to know which necessarily false propositions to retain in conscious thought by means of middle knowledge. Through middle knowledge, God could come to know, for example, the necessarily false propositional statement itself by means of knowing which necessarily false propositional statements would be referenced by external agents under any given set of circumstances.

For example, if a person were to affirm that "bachelor b is married" under a specific set of circumstances C, God would be able to entertain consciously the idea of b being married if C were actual. God would know this would be necessary by means of middle knowledge and be able to entertain the idea so that any person could make reference to the idea propositionally.

Therefore, divine conceptualism remains an option for the Molinist, although some amount of further complexity is introduced.

4.8 Conclusion

In this chapter, abstract objects have been defined and the review of positions on abstract objects has begun. The platonist view that abstract objects literally exist as uncreated entities has been established and it has been asserted that if the Molinist were to adopt one of the platonist positions, Campbell's objection to middle knowledge would carry severe weight. This is because, on one of these views, the content of God's middle knowledge would exist in a very real way, uncreated and apart from God. God would have to draw from outside of the triune Godhead to complete the middle knowledge proposed by Molinism.

Having explored the platonist's Singular Term argument, it has been shown that the Molinist could either undercut the argument by showing abstract objects are created and thus depend on God, or the Molinist must successfully

object to one or both of the premises of the Singular Term argument. Both divine conceptualism and absolute creationism have been shown to be possible avenues for the Molinist, with both requiring further refinement. In the next chapter, the arealist position will be considered before examining anti-realist options.

Chapter 5

Abstract Objects: Arealism and Anti-Realism

5.1 Introduction

The previous chapter examined the platonist's Singular Term argument and how it interacts with the claim that abstract objects being located in reality is necessary for scientific theories to be true. Abstract objects as uncreated entities was considered, as well as two views which consider abstract objects to exist as entities which are in some way dependent upon God. In this chapter, the view that no fact of the matter regarding the existence of abstract objects will be discussed before some anti-realist views are offered as alternatives.

5.2 Arealism

Arealism is primarily a philosophy of mathematics position which affirms that the question "do mathematical objects exist?" does not have an objective answer (Craig, 2015, p. 274-275). Notable proponents of this view are philosophers of mathematics Mark Balaguer (Balaguer, 1998) and Penelope Maddy (Maddy, 2011).

Arealism finds its classical roots in the work of Rudolf Carnap (Carnap, 1956), whose work is referred to as conventionalism (Craig, 2015, p. 274). Carnap held that questions of existence could only be answered within linguistic frameworks. Examples of these frameworks could be the framework of mathemat-

ics, the framework of propositions, the framework of objects and so on. On Carnap's view, existence questions can take the form of internal existence questions or external existence questions (Chalmers, 2009, p. 80).

Internal existence questions are answered within the linguistic framework that the relevant object is a member of, bearing in mind that linguistic framework's axioms and rules of logic (Bricker, 2014). For example, a mathematical question[1] like "are there prime numbers greater than 100?" is to be answered based on the axioms and rules of logic relevant to the mathematical linguistic framework.

When questions of existence are posed concerning the general objects proposed by the linguistic framework, answers are obvious simply because they are assumed to exist by the framework in question (Bricker, 2014).

External existence questions would then be questions which are asked about reality apart from any particular linguistic framework. Carnap held that these questions can be neither true nor false (Chalmers, 2009, p. 80). They "are pseudo-questions lacking any cognitive meaning" (Bricker, 2014).

Consider, for example, the question "do numbers exist?" on Carnap's view. Construed as an internal question, the answer is trivial. Within the framework of numbers, the existence of numbers is presupposed and therefore it is obvious that numbers exist. Answered as an external question, the question "do numbers exist?" can be neither true nor false (Bricker, 2014).

Considered externally, the best one could do would be to consider whether it is appropriate to accept any given linguistic framework for the question at hand. On Carnap's view, selecting any framework was a matter of convention, hence the term conventionalism[2] (Bricker, 2014).

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[1] That is, a question which is related to an object which counts itself a member of the framework of mathematics.

[2] Carnap was a pluralist, claiming that philosophers could subscribe to multiple different theories with varying degrees of ontological commitment. Carnap's view was that there was no discrepancy to be found between the ontological commitment required by different linguistic frameworks (Carnap, 1956, p. 221).

William Lane Craig takes arealism, or conventionalism with regards to putative abstract objects, to be the position that no fact of the matter exists regarding whether abstract objects exist or not (Craig, 2016, p. 206). Would this not be an option for the Molinist?

It would seem not. Craig argues that arealism is not an option for any theist. As a result of divine aseity, God exists necessarily. As such, God exists in all possible worlds (Plantinga, 1976, p. 140). In aligning themselves with the classical theist, the Molinist sees reality which exists *extra se* as being created by God. Thus, a fact of the matter regarding putative abstract objects must be true in all possible worlds: Either abstract objects exist as created by God or they do not exist at all (Craig, 2016, p. 206-207). Therefore, a fact of the matter regarding the existence of putative abstract objects most certainly does exist[3].

With all of this in mind, it seems as if the arealist position is not one which is open to either the theist or the Molinist.

5.3 Anti-realism

In previous chapters, it has been shown that three broad approaches to abstract objects exist. Realism holds that abstract objects actually exist in the same way that concrete objects like board games exist (Craig, 2015, p. 274-275). In thinking abstract objects exist, we could consider them to exist as uncreated entities or as entities which are dependent on God and began to exist at some point. Platonism, the position that uncreated abstract objects exist, is the position which presents the greatest threat to God's aseity on the Molinst view (van Inwagen, 2009, p. 4-11).

Considering abstract objects to be created, as is the case with absolute creationism (Craig, 2015, p. 274), presents the theist with the problem of the bootstrapping objection - a potentially fatal objection. For the Molinist, this

[3] Even if one were to affirm the existence of uncreated abstract objects, as Peter van Inwagen does (van Inwagen, 2009), one would still be positively affirming a fact of the matter regarding the existence of abstract objects.

view seems to be problematic due to the proposed sequence of events, as abstract objects are required to exist – if indeed they do exist – prior to God's free act of creating (Flint, 1998, p. 43).

Of the realist positions, divine conceptualism (Gould, 2011a, p. 269-271) appears to be the most viable though not without philosophical concern. In considering abstract objects to be God's thoughts and not entities which exist as created and apart from God, it appears as if the nerve between divine conceptualism and realism is severed – but this does nothing to detract from the view's viability for the Molinist (**?**, p. 209).

Arealism, the view that affirms that no fact of the matter regarding the existence of abstract objects exists, is an avenue which appears to be closed to both theists and Molinists (Craig, 2015, p. 274-275). So what then of anti-realism?

Anti-realism is the view that abstract objects simply do not exist (Craig, 2015, p. 274-275). From the Molinist's position, anti-realism seems to be the position which poses the least threat to the God's aseity, simply because on this view no abstract objects exist for God to draw on. If anti-realism is true, possible worlds, propositions, numbers, sets and shapes do not exist in a metaphysically heavyweight sense at all.

In fact, the platonic theist Peter van Inwagen has explicitly stated that he believes it is better to believe that abstract objects don't exist if this option is available[4] (van Inwagen, 2004, p. 107).

On the anti-realist position, abstract objects simply do not exist (Craig, 2016, p. 210). The content of middle knowledge does not exist in a real way[5], which means that God's knowledge is wholly self-contained. As such the objection which Travis Campbell (Campbell, 2006, p.16-19) raises regarding middle knowledge is sidestepped entirely, making this option appealing for the Molinist.

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[4] Van Inwagen's view is examined in the section called *Uncreated Abstract Objects* in Chapter 4.

[5] By this I mean, in a real way in the same way that you or I as concrete objects exist.

A number of views exist within anti-realism, all of which go about establishing their view by objecting to one or both of the premises of the Singular Term argument put forward by platonism. Theologically[6], the Molinist may be motivated to choose one of the anti-realist views simply because it could be thought to be better to deny the existence of abstract objects. Establishing which of these options is the correct choice for the Molinist would be an immensely complex and potentially an impossible endeavour. As such, that is not the aim of this thesis.

Rather, this work will simply aim to show some of the anti-realist options which exist and highlight how each view goes about objecting to one or both of the premises of the platonist's Singular term argument. No argument will be presented to show that any one of these views is to be considered better than another.

For reference, here is the Singular Term argument as formulated by Mark Balaguer:

(1) If a simple sentence (i.e., a sentence of the form "a is F", or "a is R-related to b", or. . .) is literally true, then the objects that its singular terms denote exist. (Likewise, if an existential sentence is literally true, then there exist objects of the relevant kinds; e.g., if "There is an F" is true, then there exist some Fs.)

(2) There are literally true simple sentences containing singular terms that refer to things that could only be abstract objects. (Likewise, there are literally true existential statements whose existential quantifiers range over things that could only be abstract objects.) Therefore,

(3) Abstract objects exist (Balaguer, 2016).

The first of the anti-realist views which will be explored is called fictionalism.

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[6] By *theologically*, I mean motivation based on theological concerns - that is, concerns found in Scripture or Christian tradition.

5.3.1 Fictionalism

Fictionalism promulgates the view that sentences purporting to be about abstract objects are not literally true on account of the fact that abstract objects do not exist. In saying this, the fictionalist accepts (1), but rejects (2). As an anti-realist, the fictionalist affirms that no sentence about an abstract object can be literally true because abstract objects do not exist (Balaguer, 2014, p. 8).

Fictionalism treats abstract objects as useful fictions, thereby allowing simple sentences with singular terms which make reference to abstract objects to be considered to be fictionally true (Craig, 2012, p. 443).

For example, on the platonist view the sentence "Hamlet was Danish" cannot be literally true because the singular term "Hamlet" does not refer to a real person. Nevertheless, the platonist could say that it is true to say that Hamlet was Danish in the play Hamlet written by Shakespeare. Characterised in this way, the statement "Hamlet was Danish" is fictionally true (Craig, 2012, p. 443).

The fictionalist affirms that similar treatment can be applied to sentences with singular terms which make reference to putative abstract objects such as numbers. For example, the mathematical sentence "$2 + 2 = 4$" is not literally true because the singular terms "4" and "$2 + 2$" do not exist. Nevertheless, the fictionalist would say that according to the standard model of arithmetic, the statement "$2 + 2 = 4$" could be considered to be fictionally true (Craig, 2012, p. 443-444).

The fictionalist uses this position to undercut the claim made by platonists that abstract objects are indispensable given their importance to true scientific theories (Craig, 2012, p. 443-444).

The platonists' argument as construed by the fictionalist can be formulated as such:

(i) Mathematical sentences form an indispensable part of our empirical theories of the physical world — i.e., our theories of physics, chemistry, and so on;

(ii) We have good reasons for thinking that these empirical theories are true, i.e., that they give us accurate pictures of the world; therefore,

(iii) We have good reasons to think that our mathematical sentences are true and, hence, that fictionalism is false (Balaguer, 2015).

Two different responses to this argument have been formulated by fictionalists, the first by Hartry Field (Field, 1980) and the second by Mark Balaguer (Balaguer, 1996, 1998), though this second response has been further developed by Gideon Rosen (Rosen, 2001), Stephen Yablo (Yablo, 2005), Mary Leng (Leng, 2010) and others.

Field's response can be called hard-road fictionalism and is characterised by the rejection of (i). Field argues that mathematics is not indispensable with regards to natural sciences, claiming that scientific theories can be nominalized or reformulated in such a way as to avoid making reference to abstract objects. Showing this to be true would be an inordinately large task, as each scientific theory would have to be dealt with in turn[7]. This claim is highly controversial and has a significant number of detractors[8] (Balaguer, 2015).

The second fictionalist response, which can be called easy-road fictionalism[9], accepts (i) but interprets this view from the fictionalist perspective. Easy-road fictionalists claim that hard-road fictionalism is not only a task which is likely impossible to complete, but also does not integrate with science as well (Balaguer, 2015). Balaguer argues that the fictionalist takes abstract objects to be causally impotent, and as a result true scientific theories which make use of numbers are made up of two components: a mathematical component and a natural component[10]. The mathematical component is concerned with ab-

[7] That is to say, on hard-road fictionalism every scientific theory would have to be individually reformulated so that mathematical objects such as numbers were omitted whilst preserving the truth of the scientific theory in question.

[8] For example, detractors such as David Malament (Malament, 1982) have argued that Field's endeavour could never be applied to quantum mechanics.

[9] Joseph Melia (Melia, 2000) refers to this view as *weasel fictionalism*.

[10] By natural component, I mean a component which makes reference to concrete objects in some sense.

stract objects while the natural component is concerned with concrete objects. Thus, true scientific theories are made up of two components, each of which is concerned with a different class of object.

The fictionalist affirms that these components can be considered to be true or not true independently of one another because they are made up by objects from different classes (Balaguer, 2015).

On this view, Balaguer argues that the fictionalist can choose to affirm that concrete objects exist, and as a result the component of a scientific theory which concerns itself with concrete objects is true, but that the component regarding abstract objects does not obtain because abstract objects do not exist. This leads the fictionalist to conclude that scientific theories which make use of abstract objects are not literally true, but they still provide a description of reality which is accurate (Balaguer, 2015).

Thus, the fictionalist affirms that simple sentences which make reference to abstract objects, such as mathematical sentences or scientific theories, are not literally true. However, this does not mean that these sentences are devoid of truth or value, just that they are not literally true. The fictionalist affirms that literal truth is significantly less important than fictional truth. Therefore, our mathematical sentences being not literally true is inconsequential (Balaguer, 2014, p. 8).

Easy-road fictionalism is not without detractors. Both Mark Colyvan (Colyvan, 2002) and Alan Baker (Baker, 2005) argue that mathematics plays both an explanatory role and a descriptive role in science[11]. For example, Baker provides an example of how mathematics plays a role in evolutionary biology by explaining why the nymphal stage of a species of cicada fly is either 13 years or 17 years long (Baker, 2005, p. 229-233). Baker reports that various evolutionary biologists have claimed that the reason the nymphal stage is either 13 years long or 17 years long is because both 13 and 17 are *prime* numbers (Baker, 2005, p. 230-231). Baker's contention is that this constitutes an example of how mathematics explains a physical phenomena rather than simply describing it (Baker, 2005, p. 236-237).

[11] As opposed to simply a descriptive role.

A variety of scholars have remained unconvinced by Colyvan and Baker's claims, responding with varying levels of criticism[12].

Within fictionalism, two different views exist regarding how we come to know whether a simple sentence with singular terms making reference to abstract objects would be true or not.

Consider the following: on a fictionalist view neither of the mathematical sentences "2 + 2 = 4" and "2 + 2 = 5" are literally true, yet it is the case that one of these sentences is fictionally true. How would one come to know which one of these sentences is fictionally true?

The first view, again promulgated by Field (Field, 1980), claims that we should consider each sentence based on a relevant story, or fiction, to determine whether this sentence is true or not. For example, neither the sentence "Santa wears a green coat" nor the sentence "Santa wears a red coat" could be considered to be literally true[13] (Balaguer, 2015). But based on the fictional story of Santa, "Santa wears a red coat" is fictionally true. Field argues that the same can be said of mathematical sentences, so that the fictionalist would say that the mathematical sentence "2 + 2 = 4" is true based on the story of mathematics[14] (Balaguer, 2015).

Field contends that the story of mathematics is made up of currently accepted mathematical systems and axioms such as the Peano axioms. It is from these currently accepted systems and axioms which we must draw in order to come to know the story of mathematics (Field, 1998). This view is called formalistic fictionalism (Balaguer, 2015).

The second view, called non-formalistic fictionalism, objects to the first by pointing out that the truth of mathematical statements ought to exist objectively and therefore cannot be based on the currently accepted mathematical systems, as these have the potential to change over time (Balaguer, 2015).

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[12] Some of these responses are provided by Joseph Melia (Melia, 2002), Mary Leng (Leng, 2005) and more recently by Christopher Daly and Simon Langford (Daly & Langford, 2009).

[13] Because the singular term "Santa" cannot be grounded ontologically.

[14] Or the fiction of mathematics.

That is to say, the criterion for selection as to what currently makes up the story of mathematics cannot result in a changing set of rules or logics such that the story of mathematics could change over time.

Instead, non-formalistic fictionalism proposes that the story of mathematics should be evaluated by considering how mathematical sentences would be evaluated if their singular terms were to exist in reality. This can be illustrated by asking the questions, if it were the case that abstract objects were to exist, would it be literally true to say "2 + 2 = 4"? Or would it be literally true to say "2 + 2 = 5"? The fictionalist would then construe the answer to this question as being true as a part of the mathematical story — or as being fictionally true (Balaguer, 2015).

In doing this, the fictionalist affirms that numbers are no longer indispensable and as such the platonist's claim that natural scientific theories cannot survive without mathematics is negated.

5.3.2 Figuralism

The anti-realist position called figuralism, championed by Stephen Yablo (Yablo, 2000), seeks to affirm that sentences containing abstract objects can be true without being ontologically committed to the existence of abstract objects. Yablo does this by affirming that discourse regarding putative abstract objects should be considered to be metaphorical rather than literal. Discourse of this nature should be viewed as being figurative, hence the term figuralism (Craig, 2016, p. 211).

Figuralism suggests that we ought to treat abstract objects in the same way we treat figurative language like hyperbole, understatements or metaphors. When a person states "it's raining cats and dogs" that person is not committed to animals falling from the sky - indeed the Singular Term argument only commits a speaker to grounding singular terms in *literally* true simple sentences (Balaguer, 2016).

While statement "it's raining cats and dogs" is literally false, it does not fail to convey truth. Yablo affirms that in this context, figurative language contains what he calls *real content* which is true. It is in this way that we ought to consider figures of speech and discourse regarding abstract objects to be

similar (Craig, 2016, p. 211-212). That is to say, discourse regarding abstract objects ought to be considered true based on the real content those sentences communicate.

With respect to mathematical statements, Yablo contends that their real content is the logical truth that those sentences convey. For example, on Yablo's view the real content of the mathematical sentence "2 + 3 = 5" is the logical truth:

$$[\exists_2 x(Fx)\&\exists_3 y(Gy)\&\neg\exists z(Fz\&Gz)] \rightarrow \exists_5 u(Fu \vee Gu)$$

which employs numerical quantifiers. Yablo's view is not that numbers ought to be done away with. Rather, numbers should be treated as and or considered to be tools for representing the real content of mathematics (Craig, 2012, p. 444-445).

Consider another example. The sentence "the number of Martian moons is 2" may appear to make a claim regarding an actual object known as "2". On Yablo's figuralist view, the real content of this sentence is *there are two Martian moons* — a statement which says nothing about the number 2 or any other abstract objects at all (Balaguer, 2015).

Thus, the figuralist affirms that discourse surrounding abstract objects should be treated in the same way that figurative language is: discourse of this nature should not be take to be literally true or ontologically committing, but the truth of these sentences must be recognised to be found in their real content.

John Burgess and Gideon Rosen object to figuralism, contending that mathematics being figurative rather than literal is unlikely, making this point when they say:

> Certainly in all clear cases of figurative language — and it is worth stressing that the boundary between figurative and literal is as fuzzy as can be — the non-literal character of the linguistic performance will be perfectly obvious as soon as the speaker is forced to turn attention to the question of whether the remark was meant literally.

> We further submit that mathematical discourse fails this test for non-literalness (Burgess & Rosen, 2005, p. 553).

Here, Burgess and Rosen are making the point that when a person makes use of figurative language, such as when one says "there are butterflies in my stomach", that person is clearly employing figurative language[15] (Burgess & Rosen, 2005, p. 532).

Burgess and Rosen claim that it is not clear, however, that when a person makes a statement like "the number of cats in my garden is two" they are saying "there is a cat and then there is another cat in my garden", and that they wouldn't answer in the affirmative to the question "is it true that the number of cats in your garden is prime?" (Rosen & Burgess, 2005, p. 531-532).

We can reformulate Burgess and Rosen's objection as such: When a person makes use of figurative language in the commonly understood sense of the word – such as when a person says "there are butterflies in my stomach" or something of that nature – it is clear that they have spoken figuratively. This clarity is not readily apparent when we consider language concerned with abstract objects in general, such as when a person makes a statement containing a number.

Craig points out that the objection raised by Burgess and Rosen merely shows that mathematical discourse is not a clear case of either literal or figurative language. To extrapolate from this objection that mathematical discourse cannot be treated as figurative would be to take the objection too far (Craig, 2016, p. 214).

The anti-realist presents figuralism as a reasonable way for understanding discourse regarding abstract objects. Unlike fictionalism, figuralism considers sentences like "2 + 2 = 4" to be true without requiring the singular terms "2 + 2" or "4" to exist, relieving the burden of ontological commitment necessitated by platonism when dealing with true sentences (Craig, 2016, p. 215-216).

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[15] That is to say, Burgess and Rosen claim that when a person makes use of figurative language, there is no doubt that they have done so.

5.3.3 Free Logic

In 1960, Karel Lambert abbreviated "logic free of existence assumptions with respect to its terms, singular and general, but whose quantifiers are treated exactly as in standard quantifier logic" to "free logic", thereby coining the term (Lambert, 2001, p. 258). Free logic is a position which interprets existential quantifiers in the same way that the platonist would, but affirms that singular terms may either fail to denote or may denote an object which exist outside of the domain of existing things (Nolt, 2014).

More simply put, the free logician proposes a view which does away with existence assumptions with regards to singular and general terms. On this view, singular or general terms need not refer at all, thereby reducing the ontological burden found in classical predicate logic (Nolt, 2014).

In classical logic, singular terms must denote things which exist. This, however, causes a problem when singular terms in sentences either refer to things which do not exist or are unknown. Singular terms like "the greatest integer", "the hole in my shirt" or "Aphrodite" do not exist and as a result, classical logic is unreliable when it comes to speaking of these things (Nolt, 2014).

This is because classical logic makes the assumption that the singular terms in simple sentences exist in asserting that a true sentence is about something. On classical logic, a statement like "b does not exist" can never be true if the object referred to by b does not exist (Reicher, 2015).

John Nolt provides an example of classical logic's limitations with the true sentence "We detect no motion of the earth relative to the ether" (Nolt, 2014).

Here, the singular term "the ether" denotes the light-bearing medium theorised by 19th century physicists. This sentence is true because we now know that the ether does not exist. On classical logic, however, this sentence must be considered false because the singular terms in true sentences must exist, therefore "the ether" is implied to exist — something which we now know does not exist (Nolt, 2014).

Classical logic then creates a self-contradiction where the above sentence is true, but must be considered false due to the constraints of classical logic's ontological commitment. On free logic, however, statements like this pose

no problem as non-referring singular terms, such as "the ether" in the above example, are able to exist in true sentences (Nolt, 2014).

Free logic even goes as far as to allow statements stipulating non-existence to be considered true, expressing these in first order logic as:

$$\sim \exists x \; x = t$$

which, in the context of this example, would be read as "the ether does not exist" (Nolt, 2014). Classical logic provides no such provision, and as a result makes discourse regarding non-existent objects self-contradictory (Nolt, 2014).

Furthermore, in an attempt to limit existential commitment, the free logician seeks to modify the principle of Existential Generalisation[16] from its current iteration:

$$Fa \rightarrow \exists x(Fx) \text{ (Craig, 2012, p. 446).}$$

to read as follows:

$$\exists x(x = t) \rightarrow [Pt \rightarrow \exists x(Px)] \text{ (Craig, 2012, p. 446).}$$

The free logician does this so that when a scientific theory makes reference to singular terms, ontological commitment with respect to those terms does not follow[17] (Craig, 2012, p. 446).

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[16] In classical logic the principle of Existential Generalisation can be read as "if a is F there is something which is F" (Reicher, 2015). Existential generalisation is the principle which allows one, on classical logic, to make logical deductions from statements. This can be demonstrated as: "Pegasus is a flying horse. Pegasus exists. Therefore, flying horses exist" (Reicher, 2015).

[17] The principle of Universal Instantiation allows one to make similar logical deductions to the ones which the principle of Existential Generalisation allows, but from the standpoint of a universal (Nolt, 2014). For example, "All dogs are mammals. Fido is a dog. Therefore, Fido is a mammal." On Free logic, the principle of Universal Instantiation now changes from: $\forall x A(x) \implies A(a/x)$ to: $\forall y(\forall x(Px) \rightarrow Py)$ (Craig, 2012, p.446-447)

For the anti-realist, free logic provides a way to think about singular terms making reference to abstract objects without being committed to the existence of those singular terms, but fails to solve the problem of existential quantification. For example, the statement "there are prime numbers greater than 100" still commits the free logician to the existence of numbers (Craig, 2012, p. 445).

While free logic may not solve the problem of ontological commitment in its entirety, it certainly shows that classical logic is flawed when dealing with a number of statements containing singular terms. As a result, it is not unreasonable for the Molinist to be reluctant to accept classical logic's singular term ontological commitments.

5.3.4 Meinongianism, Neo-Meinongianism and Neutral Logic

Neo-Meinongianism is the more recently developed iteration of a view initially promulgated in 1904 by the Austrian philosopher and psychologist, Alexius Meinong (Meinong, 1960) whose view takes issue with the way the platonist interprets existential quantification.

Meinong held that there are some objects which do not exist but have being. That is to say, in addition to affirming that some objects exist, Meinong's view holds that some objects which do not exist have properties in a similar way to the way existing objects have properties (van Inwagen, 2008, p. 38-39). Examples of these non-existent objects would be Sherlock Holmes, the fountain of youth or Vulcan (Reicher, 2015).

On Meinong's view, a non-existent object like Sherlock Holmes has being and as such a number of properties are attached to Sherlock Holmes such that we can meaningfully and truthfully speak about Sherlock Holmes – saying perhaps that Holmes smokes a pipe, or that Holmes speaks English.

Meinong's view entails two different types of being for objects. He held that concrete objects which have being *exist*, while abstract objects which have being *subsist*. Both concrete and abstract objects which lack being neither exist nor subsist (van Inwagen, 2008, p. 38-39).

Consider this example: my cat, Eva, is a concrete object which has being and as such exists. The Cheshire Cat is an abstract object which has being, and therefore subsists. As an abstract object which subsists, the Cheshire Cat has a number of properties. For example, the Cheshire Cat has the property of being able to speak (van Inwagen, 2008, p. 38-39).

Meinong's view was motivated by his concerns regarding intentional states which are directed at non-existent entities. The principle of intentionality affirms that mental phenomena are directed towards objects. On this view, intentional acts are always about something, such as when a person thinks about something. However, it is possible for people to think about things which do not exist. For example, one could think about Sherlock Holmes or the Cheshire Cat (Reicher, 2015).

On classical logic, to think about things which do not exist is problematic[18] (Nolt, 2014) and as a result a number of philosophers rejected intentionality. Meinong's proposed solution was to say that there is an object for every mental state, even if that object does not exist — a view which allowed Meinong to continue to refer to objects by means of singular terms[19] (Reicher, 2015).

This led Meinong to affirm that "there are objects of which it is true that there are no such objects" (Meinong, 1960, p. 83).

Naturally it would seem to be a self contradiction to affirm that a non-existent object exists. However, this conclusion is based on the understanding promulgated by classical logic that existential quantification is a means by which one makes ontological commitment. On this view, by quantifying over a range of objects, we are committed to those objects existing if the statement is to be considered true (Balaguer, 2015).

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[18] For example, on classical logic, if b does not exist, then the proposition "b does not exist" can never be true (Reicher, 2015).

[19] For example, on classical logic to affirm that "Sherlock Holmes wears a hat" is problematic because the singular term "Sherlock Holmes" fails to refer to a real entity. On Meinong's view, the singular term "Sherlock Holmes" does in fact refer to an entity, but one which *subsists*. Meinong believed that by continuing to make reference, he had solved the problem which classical logic struggled with (Reicher, 2015).

Meinong rejected this view, instead taking it to be true that quantification is ontologically neutral and as such is not existentially committing (Bricker, 2014). Thus, in quantifying over a range of objects, Meinong believed his statement could be true without requiring the objects quantified over to exist[20].

As a result of this neutral stance with regards to existential quantification, Meinong believed one could speak of or think of Pegasus the flying horse, for example, without being committed to flying horses existing.

A number of problem exist with Meinong's view of non-existent objects. Meinong affirmed an object theory which can be formulated as "so-being is independent from existence" (Reicher, 2015).

The term "so-being" can be thought of as an object's properties apart from that object's existence or non-existence (Reicher, 2015). On this view, provided an object has being, irrespective of whether that object exists or subsists, that object may have properties. Meinong used this theory of objects to affirm the subsistence of a golden mountain and a round square, claiming that these objects literally have being. Meinong came to affirm this because he believed that every property, and every set of properties, had an object which corresponds with that property or those properties – whether that object exists or subsists (Reicher, 2015).

As a prominent critic of Meinong, Bertrand Russell (Russell, 1994a,b) pointed out two major flaws with Meinong's theory of objects. The first of which was to say that some sets of propositions would be contradictions of one another and as such it would be impossible for objects to have all the properties in that set at once. For example, an object which is both round and square would be an internally incongruent object (Reicher, 2015).

The second objection can be stated as follows: If all properties will exist with every other property in some set of properties, it follows that every distinct set of properties will be attached to a minimum of one object - irrespective of whether the corresponding object exists or subsists. An example of this would be this set of three properties: the property of being a mountain, the property

[20] On Meinong's view, speaking of Sherlock Holmes was simply to speak of an object which does not exist, but rather has being and subsists.

of being golden and the property of being existent (Reicher, 2015). If this is the case, it follows that an object which is a golden mountain exists. Clearly this is not true, and as a result a contradiction can be found in Meinong's theory of objects[21] (Reicher, 2015).

As a developed version of Meinong's view, neo-Meinongianism is the anti-realist position promulgated by Richard Routley (Routley, 1979) which holds that singular terms in true sentences can make reference to objects which do not exist (Craig, 2015, p. 275-276).

Routley, being an anti-realist, takes it to be true that abstract objects do not exist and as such they have no being and do not subsist. In this regard, Routley disagrees with Meinong. On Routley's view, discourse regarding abstract objects is to be formalised by neutral quantification logic (Routley, 1979, p. 45), so as to adopt a neutral position on existential quantification (Craig, 2012, p. 446-447).

Routley's motivation for this position is that, on classical logic, the object being referred to by singular terms in a sentence must exist in reality in order for that sentence to be both about something and true (Balaguer, 2015) – something which Routley wished to avoid.

More specifically, Routley faults the traditional formulation of the principle of Existential Generalisation (Craig, 2012, p. 446-447):

$$Fa \rightarrow \exists x(Fx) \text{ (Craig, 2012, p. 446)}$$

which can be read as "if a is F there is something which is F" (Reicher, 2015). Roultey takes this principle to be "existentially loaded"[22] (Routley, 1979, p. 76), and as such seeks to remove this assumption of existence by replacing the principle of Existential Generalisation with the principle of particularisation, formulated as such (Craig, 2012, p. 446-447):

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[21] The line of thought behind this example would extend to a seemingly infinite number of other objects which could never exist.

[22] That is to say, Routley takes it to be the case that the principle of Existential Generalisation presupposes the existence of singular terms.

$$Fa \rightarrow (Px)Fx \text{ (Craig, 2012, p. 447).}$$

which can be read as "for some item, Fx". Here, the existential quantifier has been replaced by a quantifier of particularisation P, which can be read as "for some item" thereby allowing Routley to speak of particular items without denoting those items as existing. Routley then requires the principle of Existential Generalisation to be formulated using an existence predicate E, so it would appear as such (Craig, 2012, p. 446-447):

$$Fa\&Ea \rightarrow (\exists x)Fx \text{ (Craig, 2012, p. 446)}$$

so that one could continue to make use of the principle of Existential Generalisation, but only when existence is specifically stipulated rather than assumed.

Routley appeals to neutral logic, but neutral logic is a view which exists autonomously and does not rely on Meinongianism or neo-Meinongianism in any way (Craig, 2012, p. 447). Proponents of neutral logic, such as Jody Azzouni (Azzouni, 2004) and Graham Priest (Priest, 2005) object to classical logic's view of quantification by interpreting it to be ontologically neutral. Azzouni and Priest hold that quantification is simply a device by which we make logical inference, or mark a domain of objects to which we will speak. As a result, one can distinguish between "quantifier commitment" and "ontological commitment", where "quantifier commitment" does nothing more than quantify over a range of objects[23] (Reicher, 2015).

On this view, singular terms continue to refer to objects, but the domain to which that object belongs does not need to specify that the objects found in that domain must exist. One could, for example, quantify over an imaginary realm of objects which, by their definition, do not exist. Objects within this realm could be referred to truthfully, but no existential commitment would follow (Craig, 2012, p. 447).

[23] Azzouni and Priest take it to be the case that one could quantify over a range of objects and either commit to grounding those objects ontologically or not ground those objects ontologically. They disagree that by quantifying, ontological commitment must follow (Reicher, 2015).

Neutral logicians like Azzouni affirm that domains of quantification include metalanguage by which we can come to know where the domain of quantification in question necessitates ontological commitment or is simply committing to quantification. Thus, one could quantify over objects and in doing so, specify whether the object being quantified over must exist or not (Craig, 2012, p. 447).

Neutral logic differs from neo-Meinongianism in that it does not require the principle of Existential Generalisation to be reformulated as Routley proposes, but rather suggests that any domain of quantification could or could not be committed to locating its objects in reality (Craig, 2012, p. 447).

By appealing to aspects of neutral logic, the neo-Meinongian can affirm that the sentence "Some objects do not exist" merely quantifies over a range of objects, rather than both quantifying over and committing to the existence of that range of objects or indeed any number of the objects within that range[24].

Unlike the free logician, neo-Meinongians believe that singular terms do in fact refer – but that these references can be made to non-existent objects. Similarly to the free logician however, and unlike the fictionalist, the neo-Meinongian affirms that sentences containing singular terms which make reference to non-existing objects can be true (Balaguer, 2015).

The neo-Meinongian, then, claims that singular terms do refer, but that the objects referred to may or may not exist. In doing this, the neo-Meinongian is open to true discourse regarding all objects, irrespective of whether those objects exist or not. Therefore, in subscribing to the neo-Meinongian view, the anti-realist is able to make statements like "There is a number 4" without being committed to any numbers being located in reality (Craig, 2012, p. 446-447).

Neo-Meinongianism has been criticised by both Mark Balaguer (Balaguer, 2015) and Peter van Inwagwen (van Inwagen, 2004, p. 128-129) for the way it uses the term *exist*. Where van Inwagen claims that the neo-Meinongian simply uses the term ambiguously, Balaguer affirms that neo-Meinongianism does not help the anti-realist avoid platonism in any way.

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[24] In this instance, the objects being quantified over would simply be a set which are non-existent.

Suppose we were to affirm that we can see the term *true* as existing in two different forms: true_1 and true_2. On true_1, an object must be referred to in order for the sentence of the form *Fa* to be taken as true[25]. On true_2, a sentence of the form *Fa* can be true even if the singular term does not refer to an existing object (Balaguer, 2015).

We can then say that true_1 is true in the platonic sense[26] while true_2 is true in a neo-Meinongian sense[27] (Balaguer, 2015).

If all of this were the case, Balaguer claims that the platonist could easily respond by saying that they are not worried whether the normal use case of the word *true*[28] is used to mean true_1 or true_2 because the Singular Term argument is meant to communicate the truth of true_1, particularly with respect to mathematics. Thus, discussion surrounding how to understand the word *true* is mostly irrelevant. Rather, what is relevant is if the platonist has good reason to affirm the truth_1 of mathematics[29] – and indeed whether the anti-realist has good reason to object to this view (Balaguer, 2015).

Balaguer's argument affirms that, given that the neo-Meinongian claims that sentences like "3 is prime" are both true and make reference to abstract objects, the neo-Meinongian does nothing to defeat the argument put forth by platonism[30] (Balaguer, 2015).

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[25] That is to say, *a* must refer to an object located in reality in order for a simple sentence to be both true and about something.

[26] That is, the way a platonist would categorise ontological commitment in order for a sentence to be true.

[27] That is, the way a neo-Meinongian would categorise ontological commitment in order for a sentence to be true.

[28] By this I mean, the way in which the word *true* is used in ordinary English.

[29] That is, affirm the truth of mathematical statements in the true_1 sense.

[30] That is to say, the platonist affirms that simple sentences are about abstract objects, and that these abstract objects must exist in order for the sentence to be true, in the true_1 sense. The neo-Meinongian affirms that simple sentences are about abstract objects, but because these abstract objects do not exist, the sentence is true in the true_2 sense. Balaguer's claim is that quarrelling over how to understand *true* is not particularly useful because the platonist could easily affirm that they understand the term *true* in the true_1

Alternatively, the anti-realist[31] could easily concur with the neutral logician by affirming that there is no need for all quantification to be existentially compelling. By doing this, they would continue to use singular terms to refer to objects which belong to a domain, but would not be required to stipulate that the domain of objects quantified over be located in reality. One could quantify over objects like numbers, for example, and speak specifically about the number 2 without being committed to that object existing — thus negating the view that mathematics is indispensable for our theories of natural science.

5.4 Conclusion

While arealism appears to be a closed option to both theists and Molinists, anti-realist options are most certainly open to the Molinist. Furthermore, a number of these options have demonstrated deficiencies in the classical logic which the platonist draws on. While none of the positions have been shown to be preferable, they have provided different ways to think of abstract objects such that a realist position appears unnecessary in order to affirm the truth or validity of scientific theories.

The Molinist would be justified in siding with any number of the positions which find fault with the platonist's Singular Term argument. In doing so, the Molinist is able to avoid affirming the existence of abstract objects.

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sense, and their argument is structured as such. Thus, the neo-Meinongian isn't actually defeating the platonist position. (Balaguer, 2015).

[31] That is, any person seeking to affirm anti-realism by concurring with the neutral logician, by affirming the neo-Meinongian view or any of the other anti-realist views.

Chapter 6

Conclusion

6.1 Introduction

In this concluding chapter, the train of thought of this work is outlined. The primary research question is broken down, with the secondary, subsequent questions being highlighted. This is done in an attempt to show how this work developed and grew in the manner in which it did. A final conclusion is reached before future research opportunities are assessed.

6.2 Train of Thought: What is Molinism?

The primary research question for this work is "How can the Molinist preserve God's aseity while affirming God's middle knowledge?" To answer this question, the following questions first needed to be answered:

(1) What is Molinism?

(2) What does the Molinist think God's aseity is?

(3) Why would there be a problem between affirming divine aseity and middle knowledge?

In response to (1), we can say that Molinism is the solution to the conundrum of divine providence and human free will promulgated by Luis de Molina (Perszyk, 2013, p. 755-756). This raises two further questions:

(1.1) What does the Molinist take divine providence to be?

(1.2) What does the Molinist take human free will to be?

In answering (1.1), we can say that the Molinist understands divine providence to be the natural outworking of God's omniscience, omnipotence and omnibenevolence (Flint, 1998, p. 12). On this view, God's omniscience can be understood as God's complete knowledge of our universe – God knows all things about our world including its history, present state and future.

God's omnipotence is taken to be God's power to rule over this world such that all things which happen are as a result of God's specific and complete control. God's omnibenevolence is taken to be God's moral perfection and goodness (Flint, 1998, p. 12).

As such, in thinking of divine providence we can think of it as being God's perfect knowledge of and control over all things which happen in the world, with both of these characteristics being guided by God's good and morally perfect nature.

In answering (1.2), we can say that the Molinist affirms libertarian free will – the thesis that "freedom is incompatible with (causal) determinism, plus the claim that at least some number of our actions are free" (Perszyk, 2013, p. 755). In expanding this view, we can say that the Molinist affirms both that "Some human actions are free" and that "It is not possible that a free human action be ultimately causally determined by events not under the causal control of its agent" (Flint, 1998, p.22-24).

In doing so, the Molinist is committed to locating the cause of any free agent's free act within the free agent in question (Flint, 1998, p. 23). This should not be extrapolated to mean that all actions committed by any free agent find their cause in the free agent in question, just that the free actions of any free agent do.

Examining the answers to (1.1) and (1.2) might lead one to conclude that the two are incompatible: God cannot be completely in control of all things while allowing free agents to make free decisions. Either agents don't determine their actions – and are therefore not free – or God does not have full providence over our world. This may lead us to ask a further question:

> (1.3) How can the Molinist account for God having divine providence whilst also affirming that free agents are free to choose between multiple options in at least some instances?

To answer this question, the Molinst postulates God's middle knowledge. God's middle knowledge is said to exist between God's natural knowledge and God's free knowledge. God's natural knowledge is taken to be God's knowledge of all necessary truths and can be found prior to God's free act of creation (Campbell, 2006, p. 2-3). Additionally, through God's natural knowledge, God is able to comprehend all possibilities (Flint, 1998, p. 37).

God's free knowledge is taken to be the knowledge which God determines to be true based on God's decision to freely create (Flint, 1998, p. 38). God's middle knowledge exists between God's natural knowledge and God's free knowledge, prior to God's free act of creation and is made up of contingent prevolitional subjunctive conditional which are not under God's control (Flint, 1998, p. 38-40).

Through God's middle knowledge, God knows how any free creature would choose were that creature to be put in a specific set of circumstances at a specific time such that they were free with respect to making a specific decision (Perszyk, 2013, p.755). At the same time, God having this knowledge does nothing to detract from the fact that the cause of any free action taken by a free agent continues to find its cause within the agent in question, thereby preserving the freedom of free agents (Flint, 1998, p.40).

The Molinist's solution can be formulated as such: God knows everything which is necessary and everything which is possible through God's natural knowledge. God knows how any free agent would choose were they to find themselves free with respect to a decision in any given set of circumstances. In combining natural and middle knowledge, God has the knowledge required to be able to bring about a world in which free agents freely make decisions whilst at the same time all of the circumstances which obtain do so as a result of God's specific will (Perszyk, 2013, p. 755-756). As a result of this God is perfectly in control of every aspect of the world which obtains, whilst still affording free creatures libertarian free will.

6.3 Train of Thought: Aseity and an Objection

To answer the primary research question "How can the Molinist preserve God's aseity while affirming God's middle knowledge?" we now have the following set of questions:

(1) What is Molinism?

(1.1) What does the Molinist take divine providence to be?

(1.2) What does the Molinist take human free will to be?

(1.3) How can the Molinist account for God having divine providence whilst also affirming that free agents are free to choose between multiple options in at least some instances?

(2) What does the Molinist think God's aseity is?

(3) Why would there be a problem between affirming divine aseity and middle knowledge?

The task of answering (1) and subsequent questions is relatively straight forward on account of God's attributes, as well as God's knowledge, being directly related to Molinism and the claims which the Molinist makes. Answering (2) poses a slightly different challenge because Molinism does not make any direct claims regarding God's aseity.

Having said that, Molinism aligns itself quite closely with classical theism (Flint, 1998, p. 4-5) and as a result, classical theism's take on God's aseity can be taken as the default position on the matter for the Molinist. Furthermore, many Molinists in recent history have either defended or made use of the Ontological Argument for God's existence, providing a further foundation for thinking about God's nature (Plantinga, 1974b).

In affirming the Ontological Argument for God's existence, the Molinist affirms that God is maximally great in all possible ways whilst affirming that God exists by the necessity of God's nature (Craig, 2008, p. 184-185). The classical theist would typically concur with this position, often going further in asserting

that God is self-sufficient and exists independently of all creation (Grudem, 2000, p. 161).

Thus, with respect to God's aseity the Molinist can be thought of as affirming that God is the maximally great being, that God exists by the necessity of God's nature, that God exists independently and that God is self-sufficient.

To answer (3), consider the following: God's middle knowledge is made up of knowledge of how free creatures would act if they were placed in a specific set of circumstances. God would not determine this knowledge – the free creatures would (Flint, 1998, p. 22-24). Is it not possible that this creates a scenario where God relies on something outside of the triune Godhead, thus making God something other than independent, or wholly self-existent? There are two responses to this objection.

First, Thomas Flint and Alfred Freddoso have argued that if it is true that God freely chooses to create free agents, those agents determining their own actions is a logical limitation (Flint & Freddoso, 1983, p. 93-98). If this is true, then God's capacity being limited in this respect is akin to God's omnipotence being limited due to God being incapable of being able to create similarly illogical entities like a square circle (Flint & Freddoso, 1983, p. 95).

Second, God's middle knowledge exists prior to the divine decree. When God creates, free agents begin to exist and those agents can then take free action when they find themselves in specific circumstances and free with respect to certain decisions. Prior to the divine decree, those agents do not exist. As such, knowledge of how those agents would choose must take the form of propositional truths.

On this view, if abstract objects like propositions really do exist, then it would be the case that God would be required to look outside of the triune Godhead to complete God's middle knowledge. If, however, these abstract objects either exist as entities which are dependent on God, or if they do not exist at all, then we can say that God continues to not rely on anything apart from the triune Godhead.

6.4 Train of Thought: Abstract Objects

A new set of questions must now be asked about abstract objects:

> (4) Which options are open for the Molinist with respect to abstract objects?
>
> (4.1) What is an abstract object?
>
> (4.2) What are the approaches to abstract objects?

Answering (4.1) is relatively easy – objects can be broken into two classes, either abstract or concrete. Abstract objects are objects which are causally impotent and would include objects such as possible worlds, propositions, sets, numbers, shapes and so on (Gould, 2011a, p. 255-256). A further question can be asked regarding specific abstract objects which are pertinent to Molinism: '(4.1.1) What does the Molinist take a possible world to be?'

The Molinist takes a possible world to be a set of states of affairs which maximally describes the way reality is or might be (Craig, 2008, p. 183). Our world is one of many possible worlds, with each set of circumstances being described by a state of affairs (Plantinga, 1974a, p. 34-35). Through God's natural knowledge, God comprehends all possibilities – including possible worlds (Campbell, 2006, p. 2). Through God's middle knowledge, God knows how free creatures will act when placed in any specific set of non-determining circumstances (Flint, 1998, p. 40). As a result of this, God knows what will ultimately happen if God chooses to actualise any possible world.

To answer (4.2) is similarly easy: three broad approaches exist with respect to abstract objects: Arealism, realism and anti-realism (Craig, 2016, p. 203-206). Arealism can be taken to be the view that a fact of the matter regarding the existence of abstract objects simply does not exist (Craig, 2015, p. 274-275). Realism is the view that abstract objects actually exist (Craig, 2016, p. 203-206). Anti-realism is the view that abstract objects simply do not exist (Gould, 2011a, p. 271).

Three further questions must now be asked regarding abstract objects:

> (4.2.1) Is arealism open to the Molinist?

(4.2.2) Is realism open to the Molinist?

(4.2.3) Is anti-realism open to the Molinist?

Arealism, addressed in (4.2.1) is a position which appears to be closed to the Molinist. If all reality apart from God exists as created by God, then a fact of the matter regarding the existence of abstract objects must exist: either abstract objects exist created by God or they do not (Craig, 2016, p. 206-207).

The questions asked in (4.2.2) and (4.2.3) are more challenging to answer. On realism, a number of views exist, of which the platonist view is the most threatening to God's aseity (Craig, 2016, p. 206). Platonism affirms that abstract objects exist as uncreated, mind-independent entities (Craig, 2016, p. 201). Thus, on this view, possible worlds, propositions numbers and other abstract objects actually exist alongside God as uncreated and distinct entities (Craig, 2012, p. 442-443). With God's middle knowledge existing in propositional form, on platonism, God would have to look beyond the triune Godhead to complete God's middle knowledge.

Platonism argues that its view of abstract objects is necessary if we are to take our best scientific theories as being true, abstract objects must literally exist (Craig, 2012, p. 442-443). Platonism promulgates the Singular Term argument to this end, claiming that singular terms in simple sentences must be grounded in reality if those sentences are to be taken as being literally true and about something (Balaguer, 2016).

6.5 Train of Thought: Theism With the Singular Term Argument

The Singular Term argument does nothing to show that abstract objects must exist uncreated – just that they must exist. As such, one could be convinced of the truth of the Singular Term argument and adhere to a realist view which sees abstract objects as existing and dependent on God in some way.

Absolute creationism is the view promulgated by Thomas Morris and Christopher Menzel (Morris & Menzel, 1986, p. 353-362) which affirms that abstract objects exist as created by God. This view has a problem in that it falls prey to

the bootstrapping objection (Gould, 2011a, p. 268-269). This objection points out that if God has the property of being powerful, for example, then God must have made that property. But if God made that property, God must have already had the property of being powerful in order to have made the property – a vicious circle. This view suffers from a further objection specific to Molinism: If God's middle knowledge exists logically prior to the divine decree, how is it possible that God could have made abstract objects?

A second realist view is called *divine conceptualism*. Greg Welty (Welty, 2006) is a recent proponent of this view who sees abstract objects as existing in the mind of God as God's thoughts in some way (Welty, 2004, p. 55-57). On this view, abstract objects do not exist necessarily, nor do they exist distinct from God (Gould, 2011a, p. 270). On this view, abstract objects exist as thoughts in God's mind to which we can analyse or make reference to in some way (Craig, 2016, p. 208-209). Concerns exist regarding this view, such as "Why would God hold trivial or banal thoughts in conscious thought at all times so that we can make reference to them?" (Craig, 2016, p. 208-209) or "How would God come to know necessarily false propositions if the Molinist believes that all of God's knowledge is made up of necessarily true things or contingently true things?"

Furthermore, viewing Welty's divine conceptualism as a realist view does seem problematic on account of the fact that the nerve between divine conceptualism and realism seems to have been severed if abstract objects exist exclusively in the mind of God in a non-real way (Craig, 2016, p. 209). None of this serves to make divine conceptualism untenable for the Molinist, though it does mean that further investigation must be conducted.

To answer (4.2.2) completely, we must first look to answer (4.2.3).

6.6 Train of Thought: Theism Without the Singular Term Argument

If one is not convinced by the Singular Term argument, a large number of anti-realist positions exist all of which looking to detract from or undercut one or more of the Singular Term arguments premises:

Fictionalism: This view claims that abstract objects do not exist, therefore simple sentences making use of singular terms which make reference to abstract objects cannot be literally true. The fictionalist affirms that these sentences can, however, be fictionally true. Thus, the sentence "2 + 2 = 4" would be fictionally true, based on the story of mathematics (Balaguer, 2014, p. 8). On fictionalism, mathematics in scientific theories can be thought of as a useful fiction, thereby preserving the scientific theory by affirming it continues to give us an accurate description of reality (Balaguer, 2015).

Figuralism: This view argues that discourse surrounding abstract objects can be thought of as being true by treating it in the same way figures of speech are treated (Craig, 2016, p. 211). Stephen Yablo contends that figures of speech contain *real content*, so that when a person says "I have butterflies in my stomach" that person is not committed to actual butterflies existing in their stomach, yet they have still communicated truth regarding their current state (Craig, 2012, p. 444-445). Figuralism argues that in treating all discourse surrounding abstract objects in this way, abstract objects do not need to exist but their *real content* can continue to convey meaningful truth.

Free Logic: Coined by Karel Lambert, free logic claims that singular terms in simple sentences need not make reference at all – thereby removing the necessity for those objects to exist in reality in order for the sentence to be true (Lambert, 2001, p. 258). John Nolt points out that classical logic struggles to make sense of sentences which contain singular terms making reference to objects which do not exist, such as "the hole in my shirt" or the non-existent "ether" which 19th century physicists theorised (Nolt, 2014). Free logicians propose that the principles of Existential Generalisation and Universal Instantiation be reformulated to restrict ontological commitment with respect to singular terms, thereby allowing scientific theories to make use of numbers, for example, without commitment to those entities following (Craig, 2012, p. 446-446).

Meinongianism and Neo-Meinongianism: Richard Routley's neo-Meinongianism (Routley, 1979) is an anti-realist view which exists as a developed version of Alexius Meinong's view. On neo-Meinongianism, singular terms in simple sentences can make reference to objects which do not exist (Craig, 2015, p. 275-276). Like the free logician, Routley faults the principle of Existential Gener-

alisation, taking it to be "existentially loaded" (Routley, 1979, p. 76). Routley held that this assumption of existence ought to be removed and proposed doing so by reformulating the principle of Existential Generalisation so that only particular items denoted by an existence predicate would be required to exist (Craig, 2012, p. 446-447).

Neutral Logic: Logicians who affirm neutral logic take it to be the case that quantification does not imply existence (Reicher, 2015). In classical logic, in quantifying over a range of objects, the existence of those objects is required if sentences purporting to be about those objects are to be literally true (Balaguer, 2016). Neutral logicians like Graham Priest (Priest, 2005) and Jody Azzouni (Azzouni, 2004) take quantification to be simply a device by which we logically delimit a range of objects (Reicher, 2015). From this, no ontological commitment should follow. That is not to say that quantifying cannot commit one to the objects within that range existing, just that it does not follow necessarily (Reicher, 2015). Neutral logic stands apart from neo-Meinongianism and does not require the reformulation of the principle of Existential Generalisation in any way (Craig, 2012, p. 447). On neutral logic, numbers as objects would belong to a range of objects which could simply not exist. As such, numbers could exist in scientific theories without committing a person to grounding numbers in reality in order for those scientific theories to be true.

Attempting to answer (4.2.2) and (4.2.3) is now much easier: Realist views are open to the Molinist, though viewing abstract objects as mind-independent and uncreated is certainly not an option for the Molinist. Were the Molinist to do so, possible worlds, propositions and other abstract objects would exist as uncreated and apart from God from which God would have to draw in order to complete God's middle knowledge of contingent, prevolitional subjunctive conditionals.

This would seem to make God something other than wholly self-existent, thereby detracting from God's aseity. Other realist options[1] which view abstract objects as existing in some way dependent upon God are certainly open

[1] Namely platonic theism, absolute creationism and divine conceptualism.

to the Molinist.

With respect to anti-realist options, a vast array exist as options for the Molinist. All of these are possible options from a theological perspective[2], but philosophically no motivation has been provided with respect to which of these options could be thought of as better or worse for the Molinist.

Nevertheless, classical logic's existential assumptions have been attacked by neo-Meinongians and neutral logicians; free logic has shown a way to think of singular terms without requiring them to make reference to objects and fictionalism and figuralism have shown that the real content or truth of simple sentences which purport to be about abstract objects can be preserved without losing the ability to describe reality accurately.

6.7 Train of Thought: Conclusion

Thus, to answer the primary research question "How can the Molinist preserve God's aseity while affirming God's middle knowledge?" we now have the following set of questions:

(1) What is Molinism[3]?

(1.1) What does the Molinist take divine providence to be[4]?

(1.2) What does the Molinist take human free will to be[5]?

(1.3) How can the Molinist account for God having divine providence whilst also affirming that free agents are free to choose between multiple options in at least some instances[6]?

(2) What does the Molinist think God's aseity is[7]?

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[2] By *theological* perspective, I mean a perspective based on theological concerns - that is, concerns found in Scripture or Christian tradition.

[3] See chapter 2, section 1

[4] See chapter 2, section 2 called *Divine Providence*

[5] See chapter 2, section 4 called *Libertarian Freedom*

[6] See chapter 3, section 3 called *The Molinist Solution*

[7] See chapter 2, section 3 called *Divine Aseity*

(3) Why would there be a problem between affirming divine aseity and middle knowledge[8]?

(4) Which options are open for the Molinist with respect to abstract objects[9]?

(4.1) What is an abstract object[10]?

(4.1.1) What does the Molinist take a possible world to be[11]?

(4.2) What are the approaches to abstract objects[12]?

(4.2.1) Is arealism open to the Molinist[13]?

(4.2.2) Is realism open to the Molinist[14]?

(4.2.3) Is anti-realism open to the Molinist[15]?

With the answer to the primary research question, in its most simplistic form, being "The Molinist can preserve God's aseity while affirming God's middle knowledge by affirming that either abstract objects do not exist, or that they exist created by and dependent upon God."

The only options completely closed to the Molinist are platonism and arealism, with other options existing as open to the Molinist – at least from a theological perspective[16].

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[8] See chapter 3, section 4 called *Campbell's Objection*

[9] See chapters 4 and 5

[10] See chapter 4, section 2 called *Abstract Objects*

[11] See chapter 3, section 2 called *Possible Worlds*

[12] See chapter 4, section 2 called *Abstract Objects*

[13] See chapter 5, section 2 called *Arealism*

[14] See chapter 4, sections 3-7

[15] See chapter 5, sections 5.3.1 - 5.3.5

[16] By *theological* perspective, I mean a perspective based on theological concerns - that is, concerns found in Scripture or Christian tradition.

6.8 Exit Points

A number of exit points exist along this journey. For example, if one were to affirm that humans are not free or if one were to say that God does not have divine foreknowledge then it would be the case that the argument outlined in this work could be ignored. This, however, is of little interest. Human free will and God's foreknowledge are core tenants of Molinism (Flint, 1998, p. 22-40), so to deny these would really be to deny fundamental aspects of Molinism.

With this work's conclusion being relatively conservative, perhaps it would be more fruitful to consider how one may undercut the conclusion that platonism and arealism are not options for the Molinist. One way to do this would be to affirm that abstract objects exist but that they cannot be created, as Peter van Inwagen does (van Inwagen, 2009, p. 4-11).

On this view, if one were to hold that abstract objects do exist, they could not exist as created by God, but that this is simply a logical limitation because abstract objects are uncreatable – just like a square circle is uncreatable (van Inwagen, 2009, p. 3). In affirming this, one would be undercutting the thesis that the Molinist could adopt one of the realist positions which see abstract objects as dependent upon God in some capacity, but would do nothing to detract from the conclusion that an anti-realist approach to abstract objects is not an option for the Molinist.

Van Inwagen readily admits that he is convinced by the Singular Term argument presented by platonists (van Inwagen, 2015b, p. 289), though it does not logically follow to say that by assuming the position that abstract objects are uncreatable, one is committed to abstract objects existing. Nevertheless, it does seem to be true that by assume the position that abstract objects exist and are uncreatable, one is forced to affirm that God's knowledge would be made up of propositions, possible worlds and other abstract objects which would exist distinct from the triune Godhead – thereby undercutting God's aseity as understood by the Molinist.

An attempt to defeat the objection raised by Travis Campbell (Campbell, 2006, p. 16-19) whilst concurring with van Inwagen would require the reworking of what God's aseity is taken to be.

What of arealism? Taken to be the view that no fact of the matter regarding the existence of abstract objects, arealism seems to be closed to Molinists and theists alike (Craig, 2016, p. 206). The claim that this view is closed to the Molinist can be specified slightly further: the claim is not that we can know whether abstract objects exist or not. Rather, this conclusion takes it that a fact of the matter exists and is known by God. If God exists necessariliy and in all possible worlds (Plantinga, 1976, p. 140), and God has the property of being omniscient, whereby God knows all things about any world which is actual (Grudem, 2000, p. 190-193), then God would know all things about all actual worlds.

Therefore, God would know whether abstract objects exist or not, and as a result a fact of the matter would exist (Craig, 2016, p. 206-207). If one were to attempt to undercut this conclusion, one would either have to say that God does not exist by the necessity of God's own nature, or alter the way in which God's omniscience is understood.

Arguing in either of these ways is certainly possible, though this work has demonstrated reason to believe that God's aseity is thought of as existing in a certain way by classical theists and Molinists alike, that God's nature necessitates God's existence and that God's free knowledge of all actual worlds must be thought of as being unfaltering and complete. Arguing against any of these positions could be very reasonable but this work has at least demonstrated the rationale behind the Molinist's position with respect to God's free knowledge, aseity and nature.

6.9 Further Study

This work set out to answer the question "Does a way exist for the Molinist to affirm both God's aseity and God's middle knowledge", to which the answer is yes. Having said that, only a small number of views have been eliminated in this work, with none of the other possible views having been proactively argued for.

To show that any of the other views surveyed in this work can be thought of as being better for the Molinist to adopt requires further research.

6.10 Conclusion

While abstract in nature, the intricacies of ontological commitment are most certainly pertinent to the Molinist if they are to preserve God's aseity. William Lane Craig once said that it would "be on the basis of practical applications — the theological fruitfulness or lack thereof — that Molinism [ultimately] stands or falls" (Craig, 1995, p. 121). The consideration as to whether God's middle knowledge undercuts God's aseity is a very practical question with a very practical answer, even if that answer concerns itself with abstract discourse[17].

It is the conclusion of this work that it would be completely reasonable for the Molinst to reject the platonist's Singular Term argument and take an anti-realist approach to abstract objects. Having said that, were the Molinist to be convinced by the Singular Term argument, they could easily affirm one of the realist views which sees abstract objects as being dependent upon or created by God.

In adopting either of these stances, the Molinist is empowered to preserve God's aseity whilst affirming God's middle knowledge.

[17] Adhering to a Molinist world view allows one to better understand the problem of evil - one of the greatest challenges that Christianity faces. By ensuring that Molinism is able to stand up to critique regarding the existence of abstract objects, the Molinist position is strengthened thereby lending credence to a doctrine which seeks to meet the problem of evil head on.

Bibliography

Adams, R. M. (1974). Theories of Actuality. *Noûs*, *8*(3), 211–231. 59

Aquinas, T. (1948). *Summa Theologica*, (Fathers of the English Dominican, Transl.), vol. 5. Westminster: Christian Classics. 19, 20

Armstrong, D. M. (1993). A World of State of Affairs. *Philosophical Perspectives*, *7*, 429–440. 37

Azzouni, J. (2004). *Deflating Existential Consequence: A Case for Nominalism*. New York: Oxford University Press. 12, 99, 112

Baker, A. (2005). Are There Genuine Mathematical Explanations of Physical Phenomena? *Mind*, *114*(454), 223–238. 88

Balaguer, M. (1996). A Fictionalist Account Of The Indispensable Application Of Mathematics. *Philosophical Studies*, *83*(3), 291–314. 87

Balaguer, M. (1998). *Platonism and Anti-Platonism in Mathematics*. Oxford: Oxford University Press. 81, 87

Balaguer, M. (2014). A Guide for the Perplexed: What Mathematicians Need to Know to Understand Philosophers of Mathematics. *Mathematical Intelligencer*, *36*(2), 3–8. 75, 76, 86, 88, 111

Balaguer, M. (2015). Fictionalism in the Philosophy of Mathematics. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Summer 2015 ed. URL `http://plato.stanford.edu/archives/sum2015/entries/fictionalism-mathematics/` 12, 87, 88, 89, 90, 91, 96, 98, 100, 101, 102, 111

Balaguer, M. (2016). Platonism in Metaphysics. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Spring 2016 ed.
URL `http://plato.stanford.edu/archives/spr2016/entries/platonism/` 10, 60, 63, 64, 65, 66, 76, 85, 90, 109, 112

Beilby, J. K., & Eddy, P. (2001). *Divine Foreknowledge: Four Views*. Downers Grove: Inter Varsity Press. 3, 4

Bell, D., & Hart, W. D. (1979). The Epistemology of Abstract Objects: Access and Inference. *Proceedings of the Aristotelian Society, Supplementary Volumes*, *53*(1979), 1–32. 57

Bricker, P. (2014). Ontological Commitment. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Winter 2014 ed.
URL `http://plato.stanford.edu/archives/win2014/entries/ontological-commitment/` 66, 82, 97

Burgess, J. P. (2004). Mathematics and the Bleak House. *Philosophia Mathematica*, *12*(1), 18–36. 61, 62

Burgess, J. P., & Rosen, G. (2005). Nominalism Reconsidered. In S. Shapiro (Ed.) *The Oxford Handbook of Philosophy of Mathematics and Logic*, (pp. 515–535). Oxford: Oxford University Press. 92

Calvin, J. (2005). *Institutes of the Christian Religion*, (H. Beveridge, Trans.). Raleigh: Hayes Barton Press. 19

Campbell, T. J. (2006). Middle Knowledge: A Reformed Critique. *Westminster Theological Journal*, *68*(1), 1–22. 1, 2, 4, 7, 8, 28, 29, 30, 33, 35, 41, 44, 47, 48, 50, 51, 54, 56, 62, 84, 105, 108, 115

Cappelen, H., & Hawthorne, J. (2009). *Relativism and Monadic Truth*. Oxford: Oxford University Press. 43

Carnap, R. (1956). *Meaning and Necessity: A Study in Semantics and Modal Logic*. 4. Chicago: University of Chicago Press, 2 ed. 12, 81, 82

Carroll, J. (2009). Anti-Reductionism. In H. Beebee, C. Hitchcock, & P. Menzies (Eds.) *The Oxford Handbook of Causation*, (pp. 279–298). Oxford: Oxford University Press. 70, 71

Chalmers, D. (2009). Ontological Anti-Realism. In D. Chalmers, D. Manley, & R. Wasserman (Eds.) *Metametaphysics: New Essays on the Foundations of Ontology*, 1950, chap. 3, (pp. 1–50). New York: Oxford University Press. 82

Chrisholm, R. M. (1976). *Person and Object: A Metaphysical Study*. Chicago: Open Court Publishing Company. 59

Colyvan, M. (2001). *The Indispensability of Mathematics*. New York: Oxford University Press. 57, 63

Colyvan, M. (2002). Mathematics and Aesthetic Considerations in Science. *Mind*, *111*(441), 69–74. 88

Copan, P., & Craig, W. L. (2004). *Creation out of Nothing, a Biblical, Philosophical, and Scientific Exploration*. Grand Rapids: Baker Academic. 74, 75

Craig, W. L. (1991). *Divine Foreknowledge and Human Freedom: The Coherence of Theism: Omniscience*. Leiden: E.J. Brill. 9, 48, 49, 50, 51, 53, 54

Craig, W. L. (1995). Middle Knowledge And Christian Exclusivism. *Sophia*, *34*(1), 120–139. 5, 117

Craig, W. L. (1999). Men Moved By The Holy Spirit Spoke From God' (2 Peter 1.21): A Middle Knowledge Perspective. *Philosophia Christi*, *1*(1), 45–82. 1, 15, 46

Craig, W. L. (2001). *Time and Eternity: Exploring God's Relationship to Time*. Wheaton: Crossway Books. 29

Craig, W. L. (2008). *Reasonable Faith: Christian Truth and Apologetics*. Wheaton: Crossway Books, 3 ed. 4, 7, 8, 22, 23, 30, 39, 54, 106, 108

Craig, W. L. (2012). God and Abstract Objects. In A. Padgett, & J. Stumps (Eds.) *The Blackwell Companion to Science and Christianity*, (pp. 441–452). Oxford: Wiley-Blackwell. 12, 13, 56, 57, 58, 60, 62, 63, 64, 86, 91, 94, 95, 98, 99, 100, 109, 111, 112

Craig, W. L. (2013). Propositional Truth - Who Needs It? *Philosophia Christi*, *15*(2), 355–364. 10, 43

Craig, W. L. (2015). God and Abstract Objects. *Philosophia Christi*, *17*(2), 271–276. 6, 12, 13, 81, 83, 84, 98, 108, 111

Craig, W. L. (2016). God and the Platonic Host. In M. Ward, & P. S. Williams (Eds.) *CS Lewis at Poets' Corner*, (pp. 201–216). Eugene: Wipf and Stock Publishers. 6, 9, 10, 11, 12, 20, 21, 59, 60, 61, 62, 63, 68, 72, 74, 75, 76, 77, 78, 83, 84, 90, 91, 92, 108, 109, 110, 111, 116

Daly, C., & Langford, S. (2009). Mathematical Explanation and Indispensability Arguments. *Philosophical Quarterly*, *59*(237), 641–658. 89

de Molina, L. (1988). *On Divine Foreknowledge: Part IV of the Concordia*, (A.J. Freddoso, Trans.). Ithaca: Cornell University Press. 1, 15, 28

Divers, J. (2002). *Possible Worlds*. London: Routledge. 37

Field, H. (1980). *Science Without Numbers: The Defence Of Nominalism*. Princeton: Princeton University Press. 87, 89

Field, H. (1998). Mathematical Objectivity and Mathematical Objects. In C. MacDonald, & S. Laurence (Eds.) *Contemporary Readings in the Foundations of Metaphysics*, (pp. 387–403). Oxford: Basil Blackwell. 89

Fine, K. (1985). Plantinga on the Reduction of Possibilist Discourse. In J. Tomberlin, & P. van Inwagen (Eds.) *Alvin Plantinga*, (pp. 145–186). D. Reidel Publishing Company. 69

Fine, K. (1994). Essence and Modality. *Philosophical Perspectives*, *8*, 1–16. 70

FirstVaticanCouncil (1994). Dei filius. In *Catechism of the Catholic Church*. Washington, D.C.: United States Catholic Conference. 18

Flint, T. P. (1980). *Divine Freedom*. Phd dissertation, Univeristy of Notre Dame. 45

Flint, T. P. (1983). The Problem of Divine Freedom. *American Philosophical Quarterly*, *20*(3), 255–264. 7, 22, 45

Flint, T. P. (1998). *Divine Providence: The Molinistic Account*. New York: Cornell University Press. 1, 2, 3, 7, 15, 16, 17, 18, 21, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 41, 43, 44, 45, 46, 52, 54, 75, 78, 84, 104, 105, 106, 107, 108, 115

Flint, T. P. (2001). 'A Death He Freely Accepted': Molinist Reflections on the Incarnation. *Faith and Philosophy: Journal of the Society of Christian Philosophers*, *18*(1), 3–20. 46

Flint, T. P., & Freddoso, A. J. (1983). Maximal Power. In *The Existence and Nature of God*, (pp. 81–114). Notre Dame: University of Notre Dame Press. 9, 52, 53, 54, 107

Frege, G. (1956). The Thought: A Logical Inquiry. *Mind*, *65*(259), 289–311. 57

Frege, G. (1960). *The Foundations of Arithmetic*, (J.L. Austin, Trans.). Oxford: Blackwell. 57, 76

Garrigou-Lagrange, R. (1934). *God, His Existence and His Nature: A Thomistic Solution of Certain Agnostic Antinomies*, (D.M. Rose, Trans.). London: B. Herder Book Co. 9, 49, 54

Godel, K. (1947). What is Cantor's Continuum Problem? *The American Mathematical Monthly*, *54*(9), 515–525. 57

Gould, P. (2011a). The Problem of God and Abstract Objects: A Prolegomenon. *Philosophia Christi*, *13*(2), 255–273. 9, 11, 12, 23, 57, 72, 74, 75, 76, 77, 84, 108, 110

Gould, P. (2011b). Theistic Activism: A New Problem and Solution. *Philosophia Christi*, *13*(1), 127–139. 12, 59, 71, 75

Gould, P. (2014). Can God Create Abstract Objects? A Reply to Peter van Inwagen. *Sophia*, *53*(1), 99–112. 30, 70, 71

Grudem, W. (2000). *Systematic Theology: An Introduction to Biblical Doctrine*. Grand Rapids: Zondervan. 7, 16, 17, 20, 21, 67, 107, 116

Hale, B. (1987). *Abstract Objects*. Oxford: Basil Blackwell. 61

Hasker, W. (1989). *God, Time and Knowledge*. Ithaca: Cornell University. 4

Kaplan, D. (1995). A Problem in Possible World Semantics. In W. Sinott-Armstrong, D. Raffman, & N. Asher (Eds.) *Modality, Morality and Belief: Essays in Honor of Ruth Barcan Marcus*, (pp. 41–52). Cambridge: Cambridge University Press. 37

King, J. C. (2003). Tense, Modality, and Semantic Value. *Philosophical Perspectives*, *17*(1), 195–246. 43

Kvanvig, J. (1986). *The Possibility of an All-Knowing God*. New York: St. Martin's Press. 1, 15

Lambert, K. (2001). Free Logics. In L. Goble (Ed.) *The Blackwell Guide To Philosophical Logic*, (pp. 258–279). Oxford: Blackwell. 12, 93, 111

Leftow, B. (1989). A Leibnizian Cosmological Argument. *Philosophical Studies*, *57*(2), 135–155. 71

Leng, M. (2005). Mathematical Explanations. In C. Cellucci, & D. Gillies (Eds.) *Mathematical Reasoning and Heuristics*, (pp. 167–189). London: King's College Publications. 89

Leng, M. (2010). *Mathematics And Reality*. Oxford: Oxford University Press. 87

Lewis, D. K. (1973). *Counterfactuals*. Cambridge: Harvard University Press. 37

Lewis, D. K. (1980). Index, Context and Content. In S. Kanger, & S. Ohman (Eds.) *Philosophy and Grammar*, (pp. 79–100). Dordrecht: Riedel. 42

Lewis, D. K. (1986). *On the Plurality of Worlds*. June 2005. Basil: Blackwell. 37, 58

Linnebo, Ø. (2013). Platonism in the Philosophy of Mathematics. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Winter 2013 ed. URL `http://plato.stanford.edu/archives/win2013/entries/platonism-mathematics/` 60, 61

Maddy, P. (2011). *Defending the Axioms: On the Philosophical Foundations of Set Theory*. New York: Oxford University Press. 81

Malament, D. (1982). Review of Field, Science Without Numbers: A Defense of Nominalism. *The Journal of Philosophy*, *79*(9), 523–534. 87

McCann, H. J. (2012). *Creation and the Sovereignty of God*. Bloomington: Indiana University Press. 70

McGrath, M. (2014). Propositions. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Spring 2014 ed.
URL `http://plato.stanford.edu/archives/spr2014/entries/propositions/` 42, 43

Meinong, A. (1960). The Theory Of Objects, (R.M. Chrisholm, I. Levi, and D.B. Terrell, Trans.). In R. M. Chrisholm (Ed.) *Realism And The Background Of Phenomenology*, vol. 3, (pp. 76–117). Glencoe: Free Press. 12, 95, 96

Melia, J. (2000). Weaseling Away the Indispensability Argument. *Mind*, *109*(435), 455–479. 87

Melia, J. (2002). Response to Colyvan. *Mind*, *111*(441), 75–80. 89

Menzel, C. (1989). On an Unsound Proof of the Existence of Possible Worlds. *Notre Dame Journal of Formal Logic*, *30*(4), 598–603. 37

Menzel, C. (1991). The True Modal Logic. *Journal of Philosophical Logic*, *20*(4), 331–374. 69

Menzel, C. (2016). Actualism. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Winter 2016 ed.
URL `http://plato.stanford.edu/archives/win2016/entries/actualism/` 69

Morris, T. V., & Menzel, C. (1986). Absolute Creation. *American Philosophical Quarterly*, *23*(4), 353–362. 10, 11, 72, 73, 74, 109

Mouton, J. (2001). *How to Succeed in Your Master's and Doctoral Studies: A South African Guide and Resource Book*. Pretoria: Van Schaik. 5

Nolt, J. (2014). Free Logic. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Winter 2014 ed.
URL `http://plato.stanford.edu/archives/win2014/entries/logic-free/` 93, 94, 96, 111

Perszyk, K. (2000). Molinism and Compatibilism. *International Journal for Philosophy of Religion*, *48*(1), 11–33. 6

Perszyk, K. (2013). Recent Work on Molinism. *Philosophy Compass*, *8*(8), 755–770. 1, 2, 3, 6, 7, 16, 17, 24, 33, 34, 44, 45, 46, 54, 56, 103, 104, 105

Philips, R. (1964). *Modern Thomistic Philosophy*, vol. 2: Metaphy. Westminster: Newman Press. 50

Plantinga, A. (1974a). *God, Freedom and Evil*. New York: Harper & Row. 15, 22, 23, 37, 38, 39, 40, 41, 42, 59, 108

Plantinga, A. (1974b). *The Nature of Necessity*, vol. 1. Oxford: Clarendon Press. 1, 15, 22, 28, 30, 36, 75, 106

Plantinga, A. (1976). Actualism and Possible Worlds. *Theoria*, *42*(1-3), 139–160. 37, 41, 83, 116

Plantinga, A. (1983). On Existentialism. *Philosophical Studies*, *44*(1), 1–20. 69

Plantinga, A. (1996). *Warrant and Proper Function*. New York: Oxford University Press. 69

Plantinga, A. (2011). *Where the Conflict Really Lies: Science, Religion, and Naturalism*. Oxford: Oxford University Press. 58

Pollock, J. L. (1984). *The Foundations of Philosophical Semantics*. Princeton: Princeton University Press. 59

Priest, G. (2005). *Towards Non-Being: The Logic And Metaphysics Of Intentionality*. Clarendon: Oxford University Press. 99, 112

Putnam, H. (1971). *Philosophy of Logic*. New York: Harper & Row. 57, 63

Quine, W. V. O. (1948). On What There Is. *Review of Metaphysics*, *2*(5), 21–38. 57, 63

Rea, M. C. (2007). The Metaphysics of Original Sin. In P. van Inwagen, & D. Zimmerman (Eds.) *Persons: Human and Divine*, (pp. 319–356). Oxford: Oxford University Press. 46

Reicher, M. (2015). Nonexistent Objects. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Winter 2015 ed.
URL `http://plato.stanford.edu/archives/win2015/entries/nonexistent-objects/` 13, 93, 94, 95, 96, 97, 98, 99, 112

Richard, M. (1982). Tense, Propositions, and Meanings. *Philosophical Studies*, *41*(1), 337–351. 43

Rodriguez-Pereyra, G. (2015). Nominalism in Metaphysics. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Summer 2015 ed.
URL `http://plato.stanford.edu/archives/sum2015/entries/nominalism-metaphysics/` 59

Rosen, G. (2001). 'Nominalism, Naturalism, Epistemic Relativism'. *Philosophical Perspectives*, *15*, 69–91. 87

Rosen, G. (2014). Abstract Objects. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Fall 2014 ed.
URL `http://plato.stanford.edu/archives/fall2014/entries/abstract-objects/` 58, 60

Rosen, G., & Burgess, J. P. (2005). Nominalism Reconsidered. In S. Shapiro (Ed.) *The Oxford Handbook of Philosophy of Mathematics and Logic*, (pp. 515–535). Oxford: Oxford University Press. 92

Routley, R. (1979). *Exploring Meinong's Jungle and Beyond: An Investigation of Noneism and the Theory of Items*. Canberra: Australian National University Research School Of Social Sciences. 12, 98, 111, 112

Russell, B. (1912). *The Problems of Philosophy*. 1. Oxford: Oxford University Press. 57

Russell, B. (1994a). On Denoting. In A. C. Lewis, & A. Urquhart (Eds.) *Foundations of Logic, 1903-05*, vol. 4, (pp. 414–430). London: Routledge. 97

Russell, B. (1994b). Review of Meinong and Others. In A. C. Lewis, & A. Urquhart (Eds.) *Foundations of Logic, 1903-05*, vol. 4, (pp. 595–605). London: Routledge. 97

Salmon, N. (1989). Tense and Singular Propositions. In J. Almog, J. Perry, & H. Wettstein (Eds.) *Themes from Kaplan*, (pp. 331–392). Oxford: Oxford University Press. 43

Shapiro, S. (1997). *Philosophy of Mathematics: Structure and Ontology*. New York: Oxford University Press. 57

Vallentyne, P. (2011). Libertarianism. In E. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. Spring 2011 ed.
URL `http://plato.stanford.edu/archives/spr2011/entries/libertarianism/` 26

van Inwagen, P. (1975). The Incompatibility of Free Will and Determinism. *Philosophical Studies*, *27*(3), 185–199. 26

van Inwagen, P. (1985). Compatibilistic Reflections. *Australasian Journal of Philosophy*, *63*(3), 349–353. 26

van Inwagen, P. (1986). Two Concepts of Possible Worlds. *Midwest Studies in Philosophy*, *11*(1), 185–213. 37

van Inwagen, P. (1989). When is the Will Free? *Philosophical Perspectives*, *3*, 399–422. 26, 27

van Inwagen, P. (2004). A Theory of Properties. In D. W. Zimmerman (Ed.) *Oxford Studies in Metaphysics*, vol. 1, (pp. 107–138). New York: Oxford University Press. 84, 100

van Inwagen, P. (2008). McGinn on Existence. *Philosophical Quarterly*, *58*(230), 36–58. 12, 95, 96

van Inwagen, P. (2009). God and Other Uncreated Things. In *Metaphysics and God: Essays in Honor of Eleonore Stump*, (pp. 3–20). 10, 11, 67, 69, 70, 83, 115

van Inwagen, P. (2015a). A Reply to Craig. *Philosophia Christi*, *17*(2), 299–305. 68

van Inwagen, P. (2015b). Did God Create Shapes? *Philosophia Christi*, *17*(2), 285–290. 10, 67, 115

Welty, G. (2004). Truth as Divine Ideas: A Theistic Theory of the Property 'Truth'. *Southwest Journal of Theology*, *47*(1), 55–69. 11, 77, 110

Welty, G. (2006). *Theistic Conceptual Realism: The Case for Interpreting Abstract Objects as Divine Ideas*. Dphil dissertation, Oxford University. 10, 11, 76, 110

Williamson, G. I. (1964). *The Westminster Confession of Faith: For Study Classes*. Philadelphia: Presbyterian and Reformed Publishing Company. 18, 21

Wolfson, H. A. (1970). *The Philosophy of the Church Fathers. I.Faith Trinity, Incarnation*, vol. 1. Cambridge: Harvard University Press, 3 ed. 21

Woodward, J. (1990). Supervenience and Singular Causal Claims. In D. Knowles (Ed.) *Explanation and its Limits*, vol. 27, (pp. 211–246). Cambridge: Cambridge University Press. 70, 71

Yablo, S. (2000). A Paradox Of Existence. In A. Everett, & T. Hofweber (Eds.) *Empty Names, Fiction, and the Puzzles of Non-Existence*, (pp. 275–312). Stanford: Center for the Study of Language. 12, 90

Yablo, S. (2005). The Myth of the Seven. In M. E. Kalderon (Ed.) *Fictionalism in Metaphysics*, (pp. 88–115). New York: Oxford University Press. 87